Supreme Court, U.S.
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No.

IN THE

Supreme Court of the United States

OCTOBER TERM, 1994

APPLE COMPUTER, INC.,
Petitioner,

v.

MICROSOFT CORPORATION AND
HEWLETT-PACKARD COMPANY,
Respondents.

PETITION FOR WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

APPENDIX
TO ACCOMPANY PETITIONER APPLE'S PETITION

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APPLE COMPUTER, INC., a California corporation,
Plaintiff-Appellee,
v.
MICROSOFT CORPORATION, a Delaware corporation,
Defendant-Appellant.

APPLE COMPUTER, INC., a California corporation,
Plaintiff-Appellee,
v.
MICROSOFT CORPORATION, a Delaware corporation,
Defendant, and HEWLETT-PACKARD CO.,
Defendant-Appellant.

APPLE COMPUTER, INC., Plaintiff-Appellant,
v.
MICROSOFT CORPORATION, a Delaware corporation;
HEWLETT-PACKARD CO., a California corporation,
Defendants-Appellees.

Nos. 93-16867, 93-16869 and 93-16883

United States Court of Appeals,
Ninth Circuit

July 11, 1994, Argued, Submitted

September 19, 1994, Decided

RYMER, Circuit Judge:

Lisa and Macintosh are Apple computers. Each has a graphical user interface ("GUI") which Apple Computer, Inc. registered for copyright as an audiovisual work. Both GUIs were developed as a user-friendly way for ordinary mortals to communicate with the Apple computer; the Lisa Desktop

and the Macintosh Finder[1] are based on a desktop metaphor with windows, icons and pull-down menus which can be manipulated on the screen with a hand-held device called a mouse. When Microsoft Corporation released Windows 1.0, having a similar GUI, Apple complained. As a result, the two agreed to a license giving Microsoft the right to use and sublicense derivative works generated by Windows 1.0 in present and future products. Microsoft released Windows 2.03 and later, Windows 3.0; its licensee, Hewlett-Packard Company (HP), introduced NewWave 1.0 and later, NewWave 3.0, which run in conjunction with Windows to make IBM-compatible computers easier to use. Apple believed that these versions exceed the license, make Windows more "Mac-like," and infringe its copyright. This action followed.

In a series of published rulings,[2] the district court construed the agreement to license visual displays in the Windows 1.0 interface, not the interface itself; determined that all visual displays in Windows 2.03 and 3.0 were in

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[1] The Macintosh Finder is registered as a derivative work of the Lisa Desktop. Although the district court dismissed the Finder as a work in suit, the Macintosh interface has been referred to interchangeably with the Lisa during the course of this litigation.

[2] *Apple Computer, Inc. v. Microsoft Corp.*, 709 F. Supp. 925 (N.D. Cal. 1989) (*Apple I*); *Apple Computer, Inc. v. Microsoft Corp.*, 717 F. Supp. 1428 (N.D. Cal. 1989) (*Apple II*); *Apple Computer, Inc. v. Microsoft Corp.*, 759 F. Supp. 1444 (N.D. Cal. 1991) (*Apple III*); *Apple Computer, Inc. v. Microsoft Corp.*, 779 F. Supp. 133 (N.D. Cal. 1991) (*Apple IV*); *Apple Computer, Inc. v. Microsoft Corp.*, 799 F. Supp. 1006 (N.D. Cal. 1992) (*Apple V*); *Apple Computer, Inc. v. Microsoft Corp.*, 821 F. Supp. 616 (N.D. Cal. 1993) (*Apple VI*). The first two published opinions were rendered by Hon. William S. Schwarzer; after his appointment as Director of the Federal Judicial Center, this matter was reassigned to the calendar of Hon. Vaughn R. Walker.

Our treatment of facts throughout is truncated because the district court's is so extensive.

Windows 1.0 except for the use of overlapping windows[3] and some changes in the appearance and manipulation of icons; dissected the Macintosh, Windows and NewWave interfaces based on a list of similarities submitted by Apple to decide which are protectable; and applied the limiting doctrines of originality, functionality, standardization, *scenes a faire* and merger to find no copying of protectable elements in Windows 2.03 or 3.0, and to limit the scope of copyright protection to a handful of individual elements in NewWave.[4] The court then held that those elements in NewWave would be compared with their equivalent Apple elements for substantial similarity, and that the NewWave and Windows 2.03 and 3.0 works as a whole would be compared with Apple's works for virtual identity. When Apple declined to oppose motions for summary judgment of noninfringement for lack of virtual identity, however, judgments in favor of Microsoft and HP were entered.

Apple asks us to reverse because of two fundamental errors in the district court's reasoning.[5] First, Apple argues that the court should not have allowed the license for Windows 1.0 to serve as a partial defense. Second, Apple contends that the court went astray by dissecting Apple's works so as to eliminate unprotectable and licensed elements

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[3] Windows 1.0 had a tiled windowing system in which the windows were connected together in a fixed pattern such that all open windows were simultaneously visible. An overlapping system allows windows to be stacked on top of one another and moved around the screen individually.

[4] These items relate to the "zooming rectangle" animation associated with the opening or closing of an icon into a window, the "dimming" of a folder icon that has been opened into a window, and the use of a trash can icon to depict the discard function. Each appears in both versions 1.0 and 3.0 of NewWave, but none is in any version of Windows.

[5] Although it does not concede that limiting doctrines were correctly applied to each alleged similarity, Apple does not ask us to review the many discrete decisions reflected in the district court's published opinions. We have done so only to the extent of being satisfied that none makes a difference to the outcome, because we agree that the appeal turns on whether the district court's *approach* was correct.

from comparison with Windows 2.03, 3.0 and NewWave as a whole, incorrectly leading it to adopt a standard of virtual identity instead of substantial similarity. We disagree.

The district court's approach was on target. In so holding, we readily acknowledge how much more complex and difficult its task was than ours. The district court had to grapple with graphical user interfaces in the first instance—and for the first time, with a claim of copying a computer program's artistic look as an audiovisual work instead of program codes registered as a literary work. In this case there is also the unusual, added complexity of a license that arguably covers some or most of the allegedly infringing works. The district court therefore had to cut new paths as it went along; we have the luxury of looking at the case at the end of the trip. From this vantage point, it is clear that treatment of Apple's GUIs, whose visual displays are licensed to a great degree and which are a tool for the user to access various functions of a computer in an aesthetically and ergonomically pleasing way, follows naturally from a long line of copyright decisions which recognizes that works cannot be substantially similar where analytic dissection demonstrates that similarities in expression are either authorized, or arise from the use of common ideas or their logical extensions.

We therefore hold:

(1) Because there was an agreement by which Apple licensed the right to make certain derivative works, the district court properly started with the license to determine what Microsoft was permitted to copy. Infringement cannot be founded on a licensed similarity. We read Microsoft's license as the district court did, to cover visual displays—not the Windows 1.0 interface itself. That being so, the court correctly decided first to identify which visual displays in Windows 2.03, 3.0 and NewWave are licensed and which are not.

(2) The district court then properly proceeded to distinguish ideas from expression, and to "dissect" unlicensed elements in order to determine whether the remaining similarities lack originality, flow naturally from basic ideas,

or are one of the few ways in which a particular idea can be expressed given the constraints of the computer environment. Dissection is not inappropriate even though GUIs are thought of as the "look and feel" of a computer, because copyright protection extends only to protectable elements of expression.

(3) Having found that the similarities in Windows 2.03 and 3.0 consist only of unprotectable or licensed elements, and that the similarities between protectable elements in Apple's works and NewWave are de minimis,[6] the district court did not err by concluding that, to the extent there is creative expression left in how the works are put together, as a whole they can receive only limited protection. When the range of protectable and unauthorized expression is narrow, the appropriate standard for illicit copying is virtual identity. For these reasons, the GUIs in Windows 2.03, 3.0 and NewWave cannot be compared for substantial similarity with the Macintosh interface as a whole. Instead, as the district court held, the works must be compared for virtual identity.[7]

Apple also challenges dismissal of the Macintosh Finder as a work in suit. Although we agree that the Finder, which is registered as a derivative work of the Lisa Desktop, should

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[6] The court's order that the four individual similarities in NewWave were to be compared at trial with their "equivalents" in Apple's works for substantial similarity, *Apple VI*, 821 F. Supp. at 631, is not an issue on appeal. Apple does not assert infringement as to any of these elements individually, and we therefore assume that it did not oppose entry of judgment on this basis. In any event, as the district court held, *id.* at 623-25, these similarities do not comprise a core of protectable and unlicensed similarities substantial enough to warrant a finding of illicit copying under a standard of substantial similarity. *See, e.g., Data East USA, Inc. v. Epyx, Inc.*, 862 F.2d 204, 209 (9th Cir. 1988) (one remaining similar feature was "inconsequential"); *See v. Durang*, 711 F.2d 141, 143 (9th Cir. 1983) (per curiam) (five remaining similarities insufficient to convince trier of fact that works were substantially similar).

[7] Since Apple contests only the legal standard of virtual identity, we do not consider whether summary judgment was appropriately entered on the merits under that standard.

not have been dismissed as a work in suit because the underlying copyright on the Lisa has not expired, Apple's non-opposition to judgment as to the Lisa applies to the Finder as well. The Macintosh Finder is not incrementally different from the Lisa Desktop in any respect material to Apple's claims of infringement. There is accordingly no basis in the record for reversal on account of the erroneous dismissal of the Finder.

Finally, Microsoft and HP cross-appeal denial of their requests for attorney's fees. Since the district court's decision, the Supreme Court has conferred greater discretion to award fees to prevailing defendants than our law previously acknowledged. *Fogerty v. Fantasy, Inc.*, ___ U.S. ___, 114 S. Ct. 1023, 127 L. Ed. 2d 455 (1994). Therefore, we remand so that the district court may reconsider this issue in light of *Fogerty*.

I

Analysis of Apple's infringement claims must start with an agreement signed in 1985 by Apple and Microsoft, which resolved a dispute about visual displays generated by Microsoft software products. The 1985 Agreement licensed the right to use the visual displays generated by Apple's Lisa and Macintosh graphic user interface programs which appeared as derivative works in Windows 1.0.[8] As a result, to the extent that later versions of Windows and NewWave

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[8] In the Agreement, Microsoft acknowledged "that the visual displays in [Windows 1.0] are derivative works of the visual displays generated by Apple's Lisa and Macintosh graphic user interface programs." Apple granted Microsoft a nonexclusive, royalty-free, nontransferable license "to use these derivative works in present and future software programs and to license them" to third parties for use in new software programs. Microsoft, in turn, granted Apple a similar license "to use any new visual displays created by Microsoft" during the next five years as part of its Windows retail software products; Apple waived any copyright, patent, trade secret or other claim against Windows 1.0; Microsoft agreed to delay the release of any versions of its Excel spreadsheet program that would run on computers other than the Macintosh; and Microsoft agreed to release an enhanced version of Microsoft Word (a word processing program) for the Macintosh.

use the visual displays in Windows 1.0 (which came from Apple), that use is authorized.

Apple's appeal turns on whether the Agreement, properly construed, gives Microsoft the right to transfer individual elements or design features used in Windows 1.0. Apple particularly objects to any interpretation that would permit later Windows products to look more like the Macintosh than Windows 1.0 looked.

The plain language of the Agreement disposes of Apple's argument. It licenses Microsoft to use "these derivative works." "These derivative works" can only refer to Microsoft's acknowledgment that the "visual displays" generated by Windows 1.0 "are derivative works of the visual displays generated by Apple's Lisa and Macintosh graphic user interface programs." As the district court explained:

> Had it been the parties' intent to limit the license to the Windows 1.0 interface, they would have known how to say so. Instead, the "derivative works" covered by the license are identified as the "visual displays" in the Windows 1.0 interface, not the interface itself. And there is nothing in the 1985 Agreement that indicates that it was intended as a product license restricting Microsoft and its licensees to the use of the Windows 1.0 interface as a whole.

Apple II, 717 F. Supp. at 1430-31.

Apple contends that the term "visual displays" is ambiguous and can reasonably be construed (against Microsoft, as drafter) to distinguish audiovisual copyrights protecting visual works from literary copyrights protecting programs, and to cover use of so much of Apple's visual copyrights as were used in Windows 1.0 but no more. This argument fails because Apple tried to limit Microsoft's license to Windows 1.0 as a whole—but did not succeed. Apple's first draft included language providing that "at no time shall this grant extend to any appearance, look, feel, visual feature or operation other than that incorporated in Microsoft Windows." Microsoft, however, rejected this limitation. Thus, the parties had already staked out their positions by the time Microsoft produced the final draft.

Accordingly, there is no basis for construing the Agreement to grant the narrow license Apple bargained for but gave up.

Apple relies on statements by various Microsoft employees in support of its ambiguity argument. These are unavailing because the Agreement has an integration clause which precludes contradicting its terms by collateral understandings. *Hayter Trucking, Inc. v. Shell Western E & P, Inc.*, 18 Cal. App. 4th 1, 14, 22 Cal. Rptr. 2d 229 (1993). In any event, testimony by the two employees who opined that the phrase "visual displays" is ambiguous lacks force because both are engineers who took no part in negotiating the 1985 Agreement. Likewise, an internal Microsoft memorandum by Bill Gates, which states that Microsoft must "be careful not to take additional things from apple screens when we make enhancements—everything we do today is fine," raises no triable issue as it is consistent with Gates's understanding that the license was for individual displays, not the interface as a whole, and with testimony by Apple's chief negotiator that Apple's license from Microsoft gave Apple the right to incorporate into the Macintosh interface any "new visual feature" developed by Microsoft for Windows.

Apple's further contention that the district court's interpretation of the Agreement must be wrong because it would be unreasonable to suppose that Apple knowingly gave away its most valuable technological asset ignores the fact that Apple itself received valuable consideration under the Agreement: the right to use and license any new displays created by Microsoft within five years, together with Microsoft's promises to delay release of an IBM-compatible version of Excel and to release an improved version of Microsoft Word for the Macintosh. Under these circumstances, the district court properly concluded that the Agreement is not reasonably susceptible to Apple's interpretation.[9]

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[9] For the same reasons, the district court did not abuse its discretion in denying Apple's motion for leave to amend to add claims for breach of contract, rescission and unfair competition. *See Allen v. City of Beverly*

II

Apple also appeals denial of its own motion for partial summary judgment that the works, viewed overall as they are viewed by users, are unlicensed derivative works substantially similar to Apple's works. Our resolution of its argument for reversal of judgments in favor of Microsoft and HP essentially disposes of this issue.

Apple raises one additional point, however, which we address here because Apple treats it as connected to its motion. The argument is that even if the 1985 Agreement does confer a partial license to use visual displays, Microsoft and HP exceeded its scope and therefore infringed Apple's copyrights. *See, e.g., S.O.S., Inc. v. Payday, Inc.*, 886 F.2d 1081, 1087 (9th Cir. 1989) ("A licensee infringes the owner's copyright if its use exceeds the scope of its license."). The cases on which Apple relies, however, merely establish that the breach of a prohibition in the license agreement can lead to a finding of infringement. *See, e.g., id.* at 1088-89 (license granted only right to use copyrighted computer program; licensee exceeded scope of license by preparing modified version of program without licensor's permission); *Frank Music Corp. v. Metro-Goldwyn-Mayer, Inc.*, 772 F.2d 505, 511-12 (9th Cir. 1985) (license explicitly excluded performance of songs in manner performed by licensee). Where, as here, the accused works include both licensed and unlicensed features, infringement will depend on whether the unlicensed features are entitled to protection. *Cf. Data East USA, Inc. v. Epyx, Inc.*, 862 F.2d 204, 208 (9th Cir. 1988) (substantial similarity of unprotected expression does not support finding of infringement). Finally, contrary to Apple's suggestion, by concluding that the 1985 Agreement provides a partial defense, the district court did not preclude Apple from prevailing on its infringement claims; the court

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Hills, 911 F.2d 367, 373 (9th Cir. 1990). The proposed amendment would have been futile because the claims that Apple sought to add are based on its allegation that during the negotiation of the 1985 Agreement, Microsoft promised it would not make future versions of Windows any more similar in appearance to the Macintosh.

merely required Apple to prove that Microsoft and HP copied unlicensed, *protected* expression. *See S.O.S.*, 886 F.2d at 1089 & n.11 (remanding for district court to determine whether licensee's unauthorized uses infringed licensor's copyright). We see no error in the court's ruling.

III

Apple makes a number of related arguments challenging the district court's copyright analysis. It contends that the district court deprived its works of meaningful protection by dissecting them into individual elements and viewing each element in isolation. Because the Macintosh GUI is a dynamic audiovisual work, Apple argues that the "total concept and feel" of its works—that is, the selection and arrangement of related images and their animation—must be compared with that of the Windows and NewWave GUIs for substantial similarity. Apple further asserts that in this case, the court had no occasion to dissect its works into discrete elements because Microsoft and HP virtually mimicked the composition, organization, arrangement and dynamics of the Macintosh interface, as shown by striking similarities in the animation of overlapping windows and the design, layout and animation of icons. Apple also argues that even if dissection were appropriate, the district court should not have eliminated from jury consideration those elements that are either licensed or unprotected by copyright. Though stated somewhat differently, all of these contentions boil down to the same thing: Apple wants an *overall comparison* of its works to the accused works for *substantial similarity* rather than virtual identity.[10]

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[10] Apple also argues that the court erred by ruling that its audiovisual works are functional rather than aesthetic; that creative works are not copyrightable when they serve a functional purpose; and that Apple's works are "useful articles" or "compilations" under 17 U.S.C. § 101. We do not address these arguments specifically, because we do not read the district court's opinions as so holding. Rather, in the process of considering the scope of Apple's copyright the court took into account the functional aspects of graphical user interfaces and the analogous range of protection available for compilations. As we shall explain, this was not improper.

The fact that Apple *licensed* the right to copy almost all of its visual displays fundamentally affects the outcome of its infringement claims. Authorized copying accounts for more than 90% of the allegedly infringing features in Windows 2.03 and 3.0, and two-thirds of the features in NewWave. More than that, the 1985 Agreement and negotiations leading up to Microsoft's license left Apple no right to complain that selection and arrangement of *licensed* elements make the interface as a whole look more "Mac-like" than Windows 1.0.

Thus, we do not start at ground zero in resolving Apple's claims of infringement. Rather, considering the license and the limited number of ways that the basic ideas of the Apple GUI can be expressed differently, we conclude that only "thin" protection, against virtually identical copying, is appropriate. Apple's appeal, which depends on comparing its interface as a whole for substantial similarity, must therefore fail.

To prevail, Apple must show ownership of a valid copyright in the Macintosh GUI and that Microsoft and HP copied unlicensed, protected elements of its copyrighted audiovisual works. *Brown Bag Software v. Symantec Corp.*, 960 F.2d 1465, 1472 (9th Cir.), *cert. denied*, ____ U.S. ___, 113 S. Ct. 198, 121 L. Ed. 2d 141 (1992). Copying may be shown by circumstantial evidence of access and substantial similarity of both the general ideas and expression between the copyrighted work and the allegedly infringing work. *Id.*

We have traditionally determined whether copying sufficient to constitute infringement has taken place under a two-part test having "extrinsic" and "intrinsic" components. As originally adopted in *Sid & Marty Krofft Television Productions, Inc. v. McDonald's Corp.*, 562 F.2d 1157, 1164 (9th Cir. 1977), the extrinsic prong was a test for similarity of ideas based on external criteria; analytic dissection and expert testimony could be used, if helpful. The intrinsic prong was a test for similarity of expression from the standpoint of the ordinary reasonable observer, with no expert assistance. *Id.* As it has evolved, however, the extrinsic test now objectively considers whether there are

substantial similarities in *both* ideas and expression, whereas the intrinsic test continues to measure expression subjectively. *Brown Bag*, 960 F.2d at 1475; *Shaw v. Lindheim*, 919 F.2d 1353, 1357 (9th Cir. 1990). Because only those elements of a work that are protectable and used without the author's permission can be compared when it comes to the ultimate question of illicit copying, we use analytic dissection to determine the scope of copyright protection before works are considered "as a whole." *See, e.g., Brown Bag*, 960 F.2d at 1475-76 (explaining that purpose of analytic dissection is to define scope of copyright protection); *Pasillas v. McDonald's Corp.*, 927 F.2d 440, 443 (9th Cir. 1991) (copyright holder cannot rely on standard elements to show substantial similarity of expression); *Harper House, Inc. v. Thomas Nelson, Inc.*, 889 F.2d 197, 207-08 (9th Cir. 1989) (trier of fact cannot base infringement decision on unprotectable aspects of plaintiff's work).

Although this litigation has raised difficult and interesting issues about the scope of copyright protection for a graphical user interface, resolving this appeal is a matter of applying well-settled principles. In this, as in other cases, the steps we find helpful to follow are these:

(1) The plaintiff must identify the *source(s)* of the alleged similarity between his work and the defendant's work.

(2) Using analytic dissection, and, if necessary, expert testimony, the court must determine whether any of the allegedly similar features are protected by copyright. Where, as in this case, a license agreement is involved, the court must also determine which features the defendant was authorized to copy. Once the scope of the license is determined, unprotectable ideas must be separated from potentially protectable expression; to that expression, the court must then apply the relevant limiting doctrines in the context of the particular medium involved, through the eyes of the ordinary consumer of that product.

(3) Having dissected the alleged similarities and considered the range of possible expression, the court must define the scope of the plaintiff's copyright—that is, decide

whether the work is entitled to "broad" or "thin" protection. Depending on the degree of protection, the court must set the appropriate standard for a subjective comparison of the works to determine whether, as a whole, they are sufficiently similar to support a finding of illicit copying.

A

Like the plaintiff in *Brown Bag*, in this case, Apple identified the sources of alleged similarity by submitting a list of particular features in its works which are similar to features found in Windows 2.03, 3.0 and NewWave. Apple's suggestion that its arm was twisted to provide this list of similarities and that it was somehow inappropriate for the district court to ask for a list and to rely on it, instead of considering the works as a whole, is misplaced. The court had the benefit of numerous videotapes and demonstrations of the GUIs "as a whole." The district court was nevertheless obliged to identify similarities, determine their source, and decide which elements are protectable. It was thus well within the court's case management discretion to ask for a list from Apple.

B

It is not easy to distinguish expression from ideas, particularly in a new medium. However, it must be done, as the district court did in this case. *Baker v. Selden*, 101 U.S. 99, 25 L. Ed. 841 (1879).[11] As we recognized long ago in the case of competing jeweled bee pins, similarities derived from the use of common ideas cannot be protected; otherwise, the first to come up with an idea will corner the market. *Herbert Rosenthal Jewelry Corp. v. Kalpakian*, 446 F.2d 738, 742 (9th Cir. 1971). Apple cannot get patent-like protection for the idea of a graphical user interface, or the idea of a desktop metaphor which concededly came from Xerox. It can, and did, put those ideas together creatively with animation, overlapping windows, and well-designed icons; but it licensed the visual displays which resulted.

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[11] 17 U.S.C. § 102(b) codifies this principle, denying copyright protection "to any idea, procedure, process, system, method of operation, concept, principle, or discovery."

The district court found that there are five other basic ideas embodied in the desktop metaphor: use of windows to display multiple images on the computer screen and to facilitate user interaction with the information contained in the windows; iconic representation of familiar objects from the office environment; manipulation of icons to convey instructions and to control operation of the computer; use of menus to store information or computer functions in a place that is convenient to reach, but saves screen space for other images; and opening and closing of objects as a means of retrieving, transferring and storing information. *Apple V*, 799 F. Supp. at 1026. No copyright protection inheres in these ideas. Therefore, substantial similarity of expression in unlicensed elements cannot be based on the fact that the Lisa, the Finder, Windows 2.03, 3.0 and NewWave all have windows, icons representing familiar objects from the office environment that describe functions being performed and that can be moved around the screen to tell the computer what to do, menus which give easy access to information or functions without using space on the screen, or objects that open and close.

Well-recognized precepts guide the process of analytic dissection. First, when an idea and its expression are indistinguishable, or "merged," the expression will only be protected against nearly identical copying. *Krofft*, 562 F.2d at 1167-68; *Kalpakian*, 446 F.2d at 742. For example, in this case, the idea of an icon in a desktop metaphor representing a document stored in a computer program can only be expressed in so many ways. An iconic image shaped like a page is an obvious choice.

The doctrine of *scenes a faire* is closely related. As we explained in *Frybarger v. International Business Machines Corp.*, 812 F.2d 525 (9th Cir. 1987), when similar features in a videogame are "'as a practical matter indispensable, or at least standard, in the treatment of a given [idea],'" they are treated like ideas and are therefore not protected by copyright. *Id.* at 530 (quoting *Atari, Inc. v. North Am. Philips Consumer Elecs. Corp.*, 672 F.2d 607, 616 (7th Cir.), *cert. denied*, 459 U.S. 880, 103 S. Ct. 176, 74 L. Ed. 2d 145

(1982)). Furthermore, as *Frybarger* holds, "the mere *indispensable* expression of these ideas, based on the technical requirements of the videogame medium, may be protected only against virtually identical copying." *Id.*; *see also Data East*, 862 F.2d at 209 (visual displays of karate match conducted by two combatants, one of whom wears red shorts and the other white as in the sport, and who use the same moves, are supervised by a referee and are scored alike as in the sport, are inherent in the sport of karate itself and as such are unprotectable). In this case, for example, use of overlapping windows inheres in the idea of windows. A programmer has only two options for displaying more than one window at a time: either a tiled system, or an overlapping system. As demonstrated by Microsoft's *scenes a faire* video, overlapping windows have been the clear preference in graphic interfaces. Accordingly, protectable substantial similarity cannot be based on the mere use of overlapping windows, although, of course, Apple's *particular expression* may be protected.

Apple suggests that *scenes a faire* should not limit the scope of its audiovisual copyright, or at least that the interactive character of GUIs and their functional purpose should not outweigh their artistry. While user participation may not negate copyrightability of an audiovisual work, *see, e.g., Midway Mfg. Co. v. Artic Int'l, Inc.*, 704 F.2d 1009, 1011-12 (7th Cir.), *cert. denied*, 464 U.S. 823, 104 S. Ct. 90, 78 L. Ed. 2d 98 (1983); *Stern Elecs., Inc. v. Kaufman*, 669 F.2d 852, 856 (2d Cir. 1982), the district court did not deny protection to any aspect of Apple's works on this basis. In any event, unlike purely artistic works such as novels and plays, graphical user interfaces generated by computer programs are partly artistic and partly functional. They are a tool to facilitate communication between the user and the computer; GUIs do graphically what a character-based interface, which requires a user to type in alphanumeric commands, does manually. Thus, the delete function is engaged by moving an icon on top of a trash can instead of hitting a "delete" key. In Apple's GUI, the ability to move icons to any part of the screen exemplifies an essentially

functional process, indispensable to the idea of manipulating icons by a mouse.

To the extent that GUIs are artistic, there is no dispute that creativity in user interfaces is constrained by the power and speed of the computer. *See Manufacturers Technologies, Inc. v. Cams, Inc.*, 706 F. Supp. 984, 994-95 (D. Conn. 1989) (denying protection to formatting style of plaintiff's screen displays because of constraints on viable options available to programmers). For example, hardware constraints limit the number of ways to depict visually the movement of a window on the screen; because many computers do not have enough power to show the entire contents of the window as it is being moved, the illusion of movement must be shown by using the outline of a window or some similar feature. Design alternatives are further limited by the GUI's purpose of making interaction between the user and the computer more "user-friendly." These, and similar environmental and ergonomic factors which limit the range of possible expression in GUIs, properly inform the scope of copyright protection.

Originality is another doctrine which limits the scope of protection. As the Supreme Court recently made clear, protection extends only to those components of a work that are original to the author, although original selection and arrangement of otherwise uncopyrightable components may be protectable. *Feist Publications, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 348-51, 111 S. Ct. 1282, 1289-91, 113 L. Ed. 2d 358 (1991). Apple's argument that components should not be tested for originality because its interface as a whole meets the test, *see Roth Greeting Cards v. United Card Co.*, 429 F.2d 1106, 1109 (9th Cir. 1970) ("[T]he originality necessary to support a copyright merely calls for independent creation, not novelty."), is therefore misplaced. Beyond that, Apple admits that it borrowed heavily from the iconic treatments in the Xerox Star and an IBM Pictureworld research report but disputes several of the district court's individual determinations. For instance, Apple claims that its file folder and page icon designs are original. Even if they are, these particular icons add so little

to the mix of protectable material that the outcome could not reasonably be affected.

In sum, the district court's analytic dissection was appropriately conducted under the extrinsic portion of our test for whether sufficient copying to constitute infringement has taken place. We are not persuaded to the contrary by Apple's arguments that the district court shouldn't have dissected at all, or dissected too much; that it "filtered out" unprotectable and licensed elements instead of viewing the Macintosh interface as a whole; and that it should have recognized protectability of arrangements and the "total concept and feel" of the works under a substantial similarity standard.

First, graphical user interface audiovisual works are subject to the same process of analytical dissection as are other works. We have dissected videogames, which are audiovisual works and therefore closely analogous, *see, e.g., Data East*, 862 F.2d at 208-09 (performing analytic dissection of similarities to determine whether similarities resulted from unprotectable expression); *Frybarger*, 812 F.2d at 529-30 (district court correctly concluded that similar features in videogames were unprotectable ideas and that no reasonable jury could find expressive elements substantially similar), and we have dissected nonliteral elements of computer programs, which are somewhat analogous, *see, e.g., Brown Bag*, 960 F.2d at 1475-77 (rejecting argument similar to Apple's about propriety of analytic dissection of computer program components such as screens, menus and keystrokes); *Johnson Controls, Inc. v. Phoenix Control Sys., Inc.*, 886 F.2d 1173, 1176 (9th Cir. 1989) (noting special master's detailed analysis of similarities). Other courts perform the same analysis, although articulated differently. *See, e.g., Computer Assocs. Int'l, Inc. v. Altai, Inc.*, 982 F.2d 693, 706-11 (2d Cir. 1992) (adopting "abstraction-filtration-comparison" test for analyzing nonliteral structure of computer program, relying in part on our own approach); *Gates Rubber Co. v. Bando Chem. Indus.*, 9 F.3d 823, 834, 841 (10th Cir. 1993) (adopting *Altai* test, but suggesting that comparison of works as a whole may be appropriate as

preliminary step before filtering out unprotected elements); *Engineering Dynamics, Inc. v. Structural Software, Inc.*, 26 F.3d 1335, 1342-43 (5th Cir. 1994) (adopting *Gates Rubber/Altai* test to analyze scope of copyright protection for user interface, input formats and output reports); *Lotus Dev. Corp. v. Borland Int'l, Inc.*, 788 F. Supp. 78, 90, 93 (D. Mass. 1992) (describing similar three-part test); *cf. Whelan Assocs. v. Jaslow Dental Lab., Inc.*, 797 F.2d 1222, 1236 (3d Cir. 1986) (defining idea of utilitarian work as its purpose or function, and everything not necessary to that purpose as expression), *cert. denied*, 479 U.S. 1031, 107 S. Ct. 877, 93 L. Ed. 2d 831 (1987).

Nor did the district court's dissection run afoul of the enjoinder in such cases as *Johnson Controls*, 886 F.2d at 1176, *Krofft*, 562 F.2d at 1167, and *Roth*, 429 F.2d at 1110, to consider the "total concept and feel" of a work. Here, the court did not inappropriately dissect *dissimilarities*, and so did nothing to distract from subjectively comparing the works as a whole. *See Aliotti v. R. Dakin & Co.*, 831 F.2d 898, 901 (9th Cir. 1987) (indicating that as the concern of *Krofft*).

As we made clear in *Aliotti*, the party claiming infringement may place "*no* reliance upon any similarity in expression resulting from" unprotectable elements. *Id.* (emphasis added) (similarities between competing stuffed dinosaur toys on account of posture and body design, and being cuddly, stem from the physiognomy of dinosaurs or from the nature of stuffed animals and are thus unprotectable). Otherwise, there would be no point to the extrinsic test, or to distinguishing ideas from expression. In this case, it would also effectively rescind the 1985 Agreement. This does not mean that at the end of the day, when the works are considered under the intrinsic test, they should not be compared as a whole. *See McCulloch v. Albert E. Price, Inc.*, 823 F.2d 316, 321 (9th Cir. 1987) (contrasting artistic work at issue, where decorative plates were substantially similar in more than the one unprotectable element (text), with factual works which have many unprotectable elements and very little protectable

expression). Nor does it mean that infringement cannot be based on original selection and arrangement of unprotected elements. However, the unprotectable elements have to be identified, or filtered, before the works can be considered as a whole. *See Harper House*, 889 F.2d at 207-08 (reversing because "total impact and effect" test of jury instruction did not distinguish between protectable and unprotectable material, thereby improperly making it possible for jury to find copying based on unprotected material instead of selection and arrangement); *see also Pasillas*, 927 F.2d at 443 (copyright holder could not rely on unprotectable elements to show substantial similarity of expression); *Frybarger*, 812 F.2d at 529 (to extent that similarities between works were confined to ideas and general concepts, they were noninfringing).

C

The district court's conclusion that the works as a whole are entitled only to limited protection and should be compared for virtual identity follows from its analytic dissection. By virtue of the licensing agreement, Microsoft and HP were entitled to use the vast majority of features that Apple claims were copied. Of those that remain, the district court found no unauthorized, protectable similarities of expression in Windows 2.03 and 3.0, and only a handful in NewWave. Thus, any claim of infringement that Apple may have against Microsoft must rest on the copying of Apple's unique selection and arrangement of all of these features. Under *Harper House* and *Frybarger*, there can be no infringement unless the works are virtually identical.

Apple, however, contends that its audiovisual work with animation and icon design cannot be analogized to factual works such as game strategy books, *see Landsberg v. Scrabble Crossword Game Players, Inc.*, 736 F.2d 485, 488 (9th Cir.) ("[S]imilarity of expression may have to amount to verbatim reproduction or very close paraphrasing before a factual work will be deemed infringed."), *cert. denied*, 469 U.S. 1037, 105 S. Ct. 513, 83 L. Ed. 2d 403 (1984), accounting systems, *see Selden*, 101 U.S. at 104, 25 L. Ed. 841 (copyright in book describing new accounting system not

infringed when defendant copied ledger sheets used in system), or organizers, *see Harper House*, 889 F.2d at 205 (as compilations consisting largely of uncopyrightable elements, plaintiff's organizers entitled only to protection against "bodily appropriation of expression"), which are afforded only "thin" protection because the range of possible expression is narrow. *See Feist*, 499 U.S. at 349, 111 S. Ct. at 1289-90. Rather, it submits that the broader protection accorded artistic works is more appropriate. *See, e.g., McCulloch*, 823 F.2d at 321 (artistic work like a decorative plate receives broader protection because of endless variations of expression available to artist).

Which end of the continuum a particular work falls on is a call that must be made case by case. We are satisfied that this case is closer to *Frybarger* than to *McCulloch*. *See also Atari Games Corp. v. Oman*, 979 F.2d 242, 245 (D.C. Cir. 1992) (analogizing audiovisual work like a videogame to compilation of facts). Accordingly, since Apple did not contest summary judgment under the virtual identity standard on the merits, judgment was properly entered.

Apple also argues that the district court improperly confined the rule in *Shaw*, 919 F.2d at 1361, that if a work passes the extrinsic test it should go to the jury, to literary works. *See Kouf v. Walt Disney Pictures & Television*, 16 F.3d 1042, 1045-46 (9th Cir. 1994) (applying *Shaw's* rule to motion picture screenplay and holding that plaintiff failed to satisfy extrinsic test); *Brown Bag*, 960 F.2d at 1476 (declining to limit *Shaw* as a matter of law to literary works because at least some computer programs are similar to literary works). *But see Pasillas*, 927 F.2d at 442-43 (limiting *Shaw* to literary works and affirming summary judgment on competing "Man in the Moon" masks for lack of substantial similarity of protectable expression). We don't have to resolve whether audiovisual works such as GUIs are more similar to Man in the Moon masks than to scripts, however. Apple could have gone to the jury under a virtual identity standard, but elected not to.

We therefore hold that the district court properly identified the sources of similarity in Windows and

NewWave, determined which were licensed, distinguished ideas from expression, and decided the scope of Apple's copyright by dissecting the unauthorized expression and filtering out unprotectable elements. Having correctly found that almost all the similarities spring either from the license or from basic ideas and their obvious expression, it correctly concluded that illicit copying could occur only if the works as a whole are virtually identical.

IV

Apple contends that the district court erred in dismissing the Macintosh Finder as a work in suit. Based on 17 U.S.C. § 103(b), which provides that "[t]he copyright in a . . . derivative work extends only to the material contributed by the author of such work, as distinguished from the preexisting material employed in the work," the court concluded that Apple could not proceed on the Finder because the Finder is a derivative work of the original Lisa Desktop and all of the unlicensed similarities are covered by the underlying Lisa copyrights.

We agree with Apple that the district court's reading of § 103(b) is too restrictive. Although it relied on *Silverman v. CBS Inc.*, 870 F.2d 40 (2d Cir.), *cert. denied*, 492 U.S. 907, 109 S. Ct. 3219, 106 L. Ed. 2d 569 (1989), we believe that case is distinguishable. In *Silverman*, the underlying works had fallen into the public domain; the court held that the defendant could be liable for infringement only if he copied some original expression that was added by the derivative works. *Id.* at 49-50; *see also Shaw v. Lindheim*, 809 F. Supp. 1393, 1402 (C.D. Cal. 1992) (where underlying work was unregistered, owner of derivative work could not recover for copying of expression contained in original).

In this case, however, Apple is the author and copyright owner of the Lisa Desktop *and* the Macintosh Finder, both of which are still protected. Apple argues that under these circumstances, § 103(b) does not prevent it from claiming infringement of the Finder, even for copied material that was incorporated from the Lisa. *See, e.g., E.F. Johnson Co. v. Uniden Corp. of Am.*, 623 F. Supp. 1485, 1488, 1492 (D.

Minn. 1985); *Rand McNally & Co. v. Fleet Management Sys., Inc.*, 591 F. Supp. 726, 733 n.6 (N.D. Ill. 1983).

Because Apple owns the copyrights in both works, it is similarly situated to an exclusive licensee. If the copyright owner of a derivative work is the *exclusive* licensee of certain rights in the underlying work, he is treated as the copyright owner of the underlying work for the purpose of exercising those rights. 1 Melville B. Nimmer & David Nimmer, *Nimmer on Copyright* § 3.05, at 3-32.2 (1993). He can therefore sue for copying of material that appears in both the derivative work and the underlying work. *Id.*; *see Gamma Audio & Video, Inc., v. Ean-Chea*, 11 F.3d 1106, 1111-12 (1st Cir. 1993) (allowing exclusive licensee to base infringement suit on derivative works; because derivative works were unregistered, licensee could recover statutory damages only if defendant's unauthorized rental of derivative works also infringed licensee's rights in underlying works). Like an exclusive licensee, Apple owns the rights in the underlying work on which the Finder is based. It therefore may base its claims on both the Finder and the Lisa.

Nevertheless, we need not reverse. Apple contends that it was deprived of the opportunity fairly to present its case because the Finder is what everyone is familiar with and almost none of the available evidence relates to the Lisa. It concedes, however, that throughout the summary judgment proceedings the district court allowed it to present its case using the Finder. Thus, dismissal of the Finder could only have an effect if the case were to go to trial. By virtue of Apple's non-opposition to judgment on the works as a whole, we take it that the Lisa is not virtually identical to Windows 2.03, 3.0 or NewWave. As the district court found no material difference between the Lisa and the Finder, there can be no virtual identity as between the accused works and the Finder, either.

V

Both Microsoft and HP challenge the denial of their requests for attorney's fees under 17 U.S.C. § 505.[12] At the time of the district court's decision, controlling Ninth Circuit authority held that attorney's fees were not available to a prevailing defendant under § 505 unless the plaintiff's action was frivolous or in bad faith. *Cooling Sys. & Flexibles, Inc. v. Stuart Radiator, Inc.*, 777 F.2d 485, 493 (9th Cir. 1985). Since that time, however, the Supreme Court has overruled *Cooling Systems*, holding that "[p]revailing plaintiffs and prevailing defendants are to be treated alike, but attorney's fees are to be awarded to prevailing parties only as a matter of the court's discretion." *Fogerty v. Fantasy, Inc.*, ___ U.S. ___, 114 S. Ct. 1023, 1033, 127 L. Ed. 2d 455 (1994). Because the district court now has greater discretion to award attorney's fees to prevailing defendants, we remand Microsoft's and HP's requests for reconsideration in light of the standard announced in *Fogerty*. *See Jackson v. Axton*, 25 F.3d 884, 890 (9th Cir. 1994) (remanding attorney's fees issue to district court in light of *Fogerty*).

Apple argues that despite this change in the law, remand is unnecessary because the district court also made findings that require the denial of attorney's fees under the criteria set forth in *Lieb v. Topstone Industries*, 788 F.2d

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[12] Microsoft also argues that it is entitled to attorney's fees because Apple breached the 1985 Agreement by suing it for copyright infringement. *See Effects Assocs. v. Cohen*, 908 F.2d 555, 559 (9th Cir. 1990) (in granting nonexclusive license, copyright holder gives up right to sue licensee for infringement), *cert. denied*, 498 U.S. 1103, 111 S. Ct. 1003, 112 L. Ed. 2d 1086 (1991). The district court properly denied Microsoft's motion based on its earlier ruling dismissing Microsoft's counterclaim for breach of contract. As the district court noted, the plain language of the release indicates that Apple agreed not to sue Microsoft only with respect to any rights Apple might assert in Windows 1.0. Nothing in the Agreement suggests that Apple waived its right to sue Microsoft based on a claim to proprietary material in any other Microsoft programs. Because Apple did not breach the Agreement, Microsoft cannot be awarded attorney's fees on this basis.

151, 156 (3d Cir. 1986).[13] The record does not support this contention. The district court clearly indicated that it might be inclined to award attorney's fees if a finding of bad faith or frivolousness were no longer required, and it invited HP and Microsoft to renew their motions should the law in this circuit change. Remand is therefore appropriate.

AFFIRMED IN PART; REVERSED AND REMANDED IN PART.

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[13] In *Fogerty*, the Supreme Court cited the *Lieb* factors with approval. ___ U.S. at ___, 114 S. Ct. at 1033 n.19. This court has already relied on the *Lieb* criteria in setting guidelines for the award of attorney's fees to prevailing plaintiffs. *McCulloch*, 823 F.2d at 323.

APPLE COMPUTER, INC., Plaintiff,
v.
MICROSOFT CORPORATION and
HEWLETT-PACKARD COMPANY, Defendants.

No. C-88-20149-WWS

United States District Court,
N.D. California

March 20, 1989

MEMORANDUM OF DECISION AND ORDER

SCHWARZER, District Judge:

Apple Computer, Incorporated ("Apple") brings this action against the Microsoft Corporation ("Microsoft") and the Hewlett-Packard Company ("H-P"), alleging that the visual displays and images in Microsoft's product Windows 2.03 infringe Apple's copyrighted audiovisual works. Microsoft denies the allegations and moves for summary judgment on its affirmative defense that the visual displays in Windows 2.03 are within the scope of a license granted by Apple to Microsoft in a Settlement Agreement entered into by the parties on November 22, 1985 ("1985 Agreement"). Apple, in turn, moves for partial summary judgment declaring that Windows 2.03 is an unauthorized derivative work of Apple's copyrighted visual displays and dismissing Microsoft's affirmative defense based on the 1985 Agreement.[1]

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[1] In deciding the motions before it, the Court does not reach defendants' other affirmative defense that Apple's copyrights are invalid. It considers only whether the 1985 Agreement affords defendants a complete defense to this action.

Argument by counsel has been heard and counsel have had an opportunity to examine and comment on a prior draft of this ruling.

The question before the Court concerns the interpretation of the agreement between the parties, which is a question of law. *Beck Park Apts. v. United States Dept. of Hous. & Urb. Dev.*, 695 F.2d 366, 369 (9th Cir. 1982). The parties agree that there is no disputed material issue of fact and that the question before the Court is ripe for decision on these motions for summary judgment.

I. FACTUAL BACKGROUND

A. *The 1985 Agreement*

Apple achieved commercial success with its Macintosh personal computer, largely because of its distinctive user friendly graphic user interface operating environment. Apple copyrighted the visual displays in the Macintosh operating system.

Microsoft developed a competing graphic user interface, called Windows, for IBM compatible personal computers. In October 1985 Apple informed Microsoft that it thought Windows infringed on its copyrighted visual displays. Apple and Microsoft entered negotiations to resolve their dispute. These negotiations resulted in the 1985 Agreement which is the subject of the motions now before the Court.

The preamble to the 1985 Agreement states that "a dispute has arisen concerning the ownership and possible copyright infringement as to certain visual displays generated by . . . 'Microsoft Windows Version 1.0'" and five named applications programs created by Microsoft to run on the Macintosh. (MS App., Ex. A.)[2] Microsoft acknowledged

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[2] Citations to source materials conform to the following conventions: (1) Appendix to Apple's Motion for Partial Summary Judgment—"Apple App."; (2) Supplemental Appendix to Apple's Motion—"Apple Supp. App."; (3) Apple's Exhibits and Deposition Testimony Subject to Protective Order—"Apple Conf. App."; (4) Appendix to Apple's Response—"Apple Resp. App."; (5) Appendix to Apple's Reply—"Apple Reply App."; and (6) Appendix to Microsoft's Motion for Summary Judgment—"MS App.". Citations to depositions are by name of deponent, page number, and volume number where appropriate.

that the visual displays in the named programs "are derivative works of the visual displays generated by Apple's Lisa and Macintosh graphic user interface programs." (*Id.*, ¶ 1.)

Apple granted Microsoft a non-exclusive "license to use these derivative works in present and future software programs" (*id.*, ¶ 2), and Apple released Microsoft from any copyright or other claim that it might have had "as to Windows Version 1.0" (*id.*, ¶ 4). Microsoft, in turn, granted Apple a five-year, non-exclusive license "to use any visual displays created by Microsoft . . . as part of its Microsoft Windows retail software product." (*Id.*, ¶ 5.) Microsoft also agreed to develop software necessary to make the Macintosh attractive to business users, and to defer release of its Excel program for IBM compatible personal computers.

The 1985 Agreement also contains an integration clause stating that it constitutes the entire agreement between the parties. (*Id.*, ¶ 7.G.)

B. *Drafting of the 1985 Agreement*

Apple prepared the initial draft of the settlement agreement, providing for a narrow license. (MS App., Ex. 0.) Apple's draft would have granted Microsoft a nonexclusive

> license under Apple's visual copyrights covering Apple's Lisa and Macintosh user interfaces for Microsoft Windows and other Microsoft software products which are compatible with Apple's Macintosh computer . . . only for use in Microsoft Windows program (as set forth in Exhibit A) in the form that shall exist after the completion of the changes set forth in paragraph 5 and such applications as are available as of the date of this Agreement that operate under Windows. After November 1, 1986, additional applications to operate under Microsoft Windows shall be covered by the license grant of this Agreement but at no time shall this grant extend to any appearance, look, feel, visual feature or operation other than that incorporated in Microsoft Windows as it shall exist after completion of the changes set forth in paragraph 5.

(*Id.*, ¶ 1.)

Microsoft rejected the narrow license in Apple's draft and after further negotiations prepared a new draft agreement. (MS App., Ex. P.) Microsoft's draft was substantially different from the Apple draft and similar in form to the final agreement. The only relevant changes made to arrive at the final agreement were to specify more precisely that the dispute and settlement were with respect to visual displays in Windows 1.0. The description of Windows in the preamble by reference to the object code and the words "the current version of Windows" in the release clause both were replaced with the words "Microsoft Windows Version 1.0."

II. DISCUSSION

The issue before the Court is whether the license granted by Apple in the 1985 Agreement provides Microsoft with a complete defense against Apple's claims that the visual displays in Windows 2.03 infringe Apple's copyrights. Apple contends that the license is limited to visual displays in Windows 1.0 or virtually identical to those in Windows 1.0. Microsoft, in turn, contends that the license is broad enough to cover enhancements to the Windows program, and that, even if Apple's narrow construction is adopted, the visual displays in Windows 2.03 are virtually identical to those in Windows 1.0.

A. *Scope of the License Under the 1985 Agreement*

The Court must interpret the 1985 Agreement so as to give effect to the mutual intentions of the parties at the time that the Agreement was entered. Cal. Civ. Code § 1636. The parties have submitted voluminous excerpts from depositions in which, for the most part, the protagonists testified to their intentions in entering into the 1985 Agreement in a manner invariably consistent with their respective positions in this law suit. Such self-serving testimony is of little assistance in interpreting the Agreement. Instead, the Court must rely principally on the contemporary evidence. Cal. Civ. Code § 1647; *see also Anchor Casualty Co. v. Surety Bond Sav. & Loan Ass'n*, 204 Cal. App. 2d 175, 183, 22 Cal. Rptr. 278, 282 (1962) (prior negotiations relevant).

That evidence shows that whether the license should be limited to the existing visual displays in Windows 1.0 was a critical point of contention. Apple's initial draft contained a narrow license to use Apple's visual displays only in the then current version of Windows and in current and future applications programs. It also limited future applications programs so that the graphic display that a user would see on running a Windows applications program would never have an appearance, look, or feel other than that which already existed in Windows at the time of the 1985 Agreement. Microsoft rejected this narrow license and proposed different language. Apple felt that Microsoft's proposed language was too broad. The written comments of Apple's associate general counsel Rappaport on Microsoft's proposed license stated that the "grant is broader than we intend; we intend to license only their current version of Windows." (MS App., Ex. Q.)

When the two principals primarily responsible for drafting the agreement, Rappaport and Microsoft vice president of legal and corporate affairs Neukom, met to go over Microsoft's draft, this point was discussed. Neukom testified that he understood from Rappaport that "he thought this was a product license, that is, that whatever visuals would be covered by the license would only, could only be used by Microsoft in current versions of its Windows product." (Neukom Depo., 53-54.) Neukom continued: "We felt quite to the contrary and had reflected in our draft how differently we approached the question . . . because our license was intended not to have a limitation to the current version of Windows." (*Id.*, 54.)

Thus, the issue was framed in the negotiations and the choice of words in the 1985 Agreement as executed must necessarily be considered to have been deliberate.

Had Apple's narrow provision been dropped without a substitute restriction, it would be reasonable to interpret the agreement as giving Microsoft a blanket license to develop future Windows programs.

However, the parties substituted language showing an intent to limit the license and accompanying release of

claims to the visual displays in the then current version of Windows, Version 1.0, and in the named applications programs. The preamble of the Agreement defines the subject matter of the dispute as "certain visual displays generated by several Microsoft software products," and then goes on to specify those products as "Microsoft Windows *Version 1.0*" and certain named applications programs. (MS App., Ex. A (emphasis added).) Microsoft then acknowledges that "the visual displays in the above-listed Microsoft programs are derivative works of the visual displays generated by Apple's Lisa and Macintosh graphic user interface programs." (*Id.*) The license granted by Apple to Microsoft is "to use *these derivative works* in present and future software programs." (*Id.* (emphasis added).) Finally, Apple's release of copyright and other claims against Microsoft goes only to "Microsoft Windows *Version 1.0*." (*Id.* (emphasis added).)

Microsoft stresses that the license is for use in "present and future software programs," indicating that the parties foresaw that Microsoft would continue to develop its Windows program, and intended to include future versions of Windows within the scope of the license. That language is limited, however, by the specification of the subject matter of the license, i.e., the "derivative works" as defined in the preamble and first paragraph of the 1985 Agreement. Hence these words do not expand the scope of the license to allow Microsoft to develop future versions of Windows as it pleases; instead they allow Microsoft only to use the licensed visual displays in future versions of Windows and in different applications programs, whether then in existence or not. That conclusion is supported by comparison of the specific language used in the license from Apple to Microsoft with the more general language used in the license from Microsoft to Apple, licensing Apple "to use *any new visual displays* created by Microsoft." (*Id.* (emphasis added).) *See* Cal. Civ. Code § 1641 (one clause of contract may be used to interpret another clause in contract).

Microsoft also contends that overlapping windows are not a visual display but, rather, that each individual window

is itself a visual display, and that the combination of windows on the screen is a screen display and hence not a derivative work subject to the restrictions of the license. Thus, it maintains, the license allows it to put different windows on the screen in any way that it chooses, whether tiled or overlapping. Microsoft's technical witnesses concede, however, that the term "visual display" could mean anything from a single visual element to the entire screen display. (Trower Depo., II 23; Konzen Depo., 97-99.) Moreover, in light of Microsoft's promotion of Windows 2.0 as visually new and different, Microsoft's unsupported assertion of this distinction between "screen display" and "visual display" is not persuasive.

Even if Microsoft's interpretation of the words "visual display" were as plausible as Apple's, because Microsoft drafted the language, Apple's interpretation would control. *See Interpetrol Bermuda Ltd. v. Kaiser Aluminum Int'l Corp.*, 719 F.2d 992, 998 (9th Cir. 1983) ("Where, after examining all the evidence, including the course of relations between parties and the circumstances under which they executed the contract, a question of contract interpretation remains, a court is entitled to resolve the question against the party who prepared a writing.").

Microsoft also contends that the license covers any visual display that can be generated by any of the five named applications programs when run on the Macintosh. The parties devote considerable space in their memoranda to argument over the meaning of the words "generated by" in the preamble to the 1985 Agreement. The dispute is over whether the visual displays in issue are "generated by" Microsoft's applications software or by the Macintosh system software. This argument, reminiscent of the disputes of medieval savants over how many angels can dance on the head of a pin, need not be resolved.

There is no evidence that the negotiators of the 1985 Agreement were concerned with the highly technical and complex matter of the interplay of applications and system software. To the contrary, it is clear that what they were concerned with was the end product: the visual interface.

Neukom's testimony shows that when he drafted the agreement, he attached no technical meaning to the words he chose; he used "visual displays generated by" and "visual displays in"—the latter being the words used to define derivative works in paragraph 1—interchangeably. (Neukom Depo., 98-99.) And to construe the 1985 Agreement, by virtue of the addition of two innocuous words in one sentence, as licensing all visual displays that can be called up by running five applications programs on Macintosh would defy common sense.

Microsoft is correct when it maintains that Apple received valuable consideration for the license; but it is not reasonable to construe the 1985 Agreement as giving Microsoft in return an essentially open-ended license to use whatever visual displays its named software could generate on a Macintosh, then or in the future. What Microsoft received was a license to use the visual displays in the named software products as they appeared to the user in November 1985.

Finally, Microsoft contends that, even if the license is limited to Windows 1.0, it would cover any visual display that an applications programmer could generate using Windows 1.0. Microsoft submits the declaration of one of its software engineers that he managed to write applications programs using Windows 1.0 that generated each of the visual displays offered by Apple as examples of infringing displays generated using Windows 2.03. (Gunderson Decl.)

This argument proves too much. If it were accepted, the logical conclusion would be that Apple licensed whatever visual displays a skilled programmer might be able to generate by writing new code that, incidentally, used calls to Windows 1.0 subroutines. This would amount to a license to all of the visual displays that make the Macintosh operating environment unique. Considering the great value to Apple of the graphic interface embodied in its Macintosh operating environment, it is contrary to reason and common sense to interpret the 1985 Agreement as creating a blanket license the limits of which are defined only by the limits of the ingenuity and skill of programmers. *See, e.g., Howe v.*

American Baptist Homes of the West, Inc., 112 Cal. App. 3d 622, 627, 169 Cal. Rptr. 418, 420 (1980) (reasonable construction consistent with language of contract must prevail over unreasonable construction).

Accordingly, the plain intent and meaning of the 1985 Agreement is to grant a license and release[3] limited to the visual displays in Windows 1.0 and the named applications programs as they then existed and appeared to the user.

B. *Application of the License to Windows 2.03*

Regardless of how one interprets the license in the 1985 Agreement, if the visual displays of Windows 2.03 are virtually the same as those of Windows 1.0, then Windows 2.03 is covered by the license. However, the testimony of Microsoft's witnesses and the contemporary record compel the conclusion that the visual displays of the two programs are fundamentally different.

The main applications window in Windows 1.0 uses a tiled format in which the different applications windows appear next to each other and do not overlap. (Apple App., Ex. 82, Microsoft Windows Software Development Kit, Application Style Guide, Version 1.03, p. 5.) Microsoft promoted this feature as distinguishing Windows 1.0 from other windowing programs. In the promotional brochure for Windows 1.0, after stating that Windows 1.0 allows an IBM compatible personal computer to "have the friendly kind of features that make computers like the Apple Macintosh so easy and efficient to run," the first distinguishing feature that Microsoft listed was

> No Overlapping. Unlike other windowing products, Microsoft Windows doesn't overlap its application windows. With Windows, your views are "tiled," conveniently sitting next to each other, so you can see all of them. . . . [Y]ou never "lose" a window.

(Apple App., Ex. 79, Microsoft Windows At a Glance.)

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[3] Microsoft contends that this interpretation of the license provision renders the release clause redundant. However, the license covers future use of Apple's visual displays and the release covers past use.

In contrast, the main applications window in Windows 2.03 is an overlapping window. (Apple App., Ex. 83, Microsoft Windows Software Development Kit, Application Style Guide, Version 2.0, p. 5.) Microsoft chairman Gates testified that "the fundamental differences [between the two versions of Windows] were in the code between these two things. . . . [W]e changed the Style Guide to encourage people to use overlapping, and we took the tile code out. . . . The top-level main windows were changed so that the built-in applications worked in an overlapped fashion." (Gates Depo., 55-57.) Microsoft director of user interface design Trower testified that "the most obvious difference between the products is the lack of tiled windows." (Trower Depo., 210.) Microsoft's lead programmer for the Windows user interface group Konzen agreed that "there are some fundamental differences between the visual displays of Windows 2.03 and the visual displays of Windows 1.0," including the change from tiled to overlapping windows. (Konzen Depo., 157-58.)

Microsoft featured this change from tiled to overlapping windows as a major selling point for Windows 2.0. The press release announcing the new version advertised a "new visual interface with overlapping windows." (Apple App., Ex. 85, Microsoft News Release.) And a Microsoft publication touting the new Windows system stated that there are substantial differences between Windows 1.0 and Windows 2.0, the first difference listed being the change from tiled to overlapping windows. (Apple App., Ex. 70, Vellon, *The OS/2 Windows Presentation Manager: Microsoft Windows on the Future*, Microsoft Systems J. 13, 15 (May 1987).)

Thus, it cannot be disputed that Windows 2.03 is significantly different from Windows 1.0. And this difference is significant to Apple. The Windows 1.0 operating environment, as shipped by Microsoft, was a tiled window system, different from the Macintosh operating environment; Windows 2.03 was designed, when run over an applications program, to generate overlapping windows, which is a major feature of the Macintosh operating environment; and Windows 2.03 is more similar in overall visual appearance to

the Macintosh visual displays than Windows 1.0. (Konzen Depo., 26, 78, 118; *see also* Trower Depo. 210, 219; Davis Depo., 89.)

Without contesting that Windows 2.03 represents a major change from Windows 1.0,[4] Microsoft contends that Windows 2.03 is still within the scope of the license because Windows 1.0 supported overlapping windows substantially similar to those featured in Windows 2.03. However, as discussed in the previous section, the mere fact that it is possible to generate overlapping windows using Windows 1.0 is not sufficient to bring all overlapping windowing programs within the scope of the license. That overlapping windows were an insignificant aspect of Windows 1.0 is confirmed by Microsoft's promotional material distinguishing Windows 1.0 from the Macintosh operating environment by featuring non-overlapping windows. (*See* Apple App., Ex. 79, Microsoft Windows At a Glance.) It is not reasonable to conclude that Apple gave up this valuable distinguishing feature in the absence of explicit language.

C. *Estoppel of Microsoft to Deny Copyright Infringement*

Apple's contention that Microsoft is estopped to deny copyright infringement by reason of the 1985 Agreement is premature. Because the Court holds only that the Agreement is not a complete defense to the infringement claims against Windows 2.03, the issues of infringement and of whatever other defenses may be available to Microsoft must be deferred for resolution in the next phase of the litigation. The Court has no record before it that would enable it to determine whether there is a relevant and valid copyright and whether it is infringed. Thus it could not decide whether Microsoft is estopped to deny infringement of works for which it holds no license.

III. ORDER

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[4] Microsoft would be hard pressed to make such a contention. The change in numbering from a "1" to the left of the decimal place to a "2" represented a major new version release. (Shirley Depo., 25.; Davis Depo., 78.)

For the reasons stated, Apple's motion for partial summary judgment is granted to the extent that the Court determines and adjudicates that the November 22, 1985 Settlement Agreement is not a complete defense to Apple's infringement claims with respect to Windows 2.03. In all other respects, Apple's motion is denied without prejudice. Microsoft's motion for summary judgment is granted to the extent that the Court determines and adjudicates that the November 22, 1985 Settlement Agreement licenses Microsoft to use the visual displays in Windows 1.0 and the named applications programs in current and future software products. In all other respects Microsoft's motion is denied.

The parties are directed to meet and confer with respect to further proceedings in this action and be prepared to discuss them at a status conference to be held on April 14, 1989, at 10 a.m.

IT IS SO ORDERED.

APPLE COMPUTER, INC., Plaintiff,
v.
MICROSOFT CORPORATION and
HEWLETT-PACKARD COMPANY, Defendants.

No. C-88-20149-WWS

United States District Court,
N.D. California

July 25, 1989

MEMORANDUM OF DECISION AND ORDER

SCHWARZER, District Judge:

Apple Computer, Inc. ("Apple") has brought this copyright infringement action against Microsoft Corporation ("Microsoft") and Hewlett-Packard Company ("HP"), alleging that the visual displays in Microsoft's software product Windows 2.03 and HP's product NewWave infringe Apple's copyrighted graphic user interface.

Microsoft and HP previously moved for summary judgment under the Agreement between Apple and Microsoft dated November 22, 1985 ("Agreement"). In its prior ruling, the Court held that the Agreement is not a complete defense to Apple's infringement claims with respect to Windows 2.03. It also held that the Agreement licenses Microsoft "to use the visual displays in Windows 1.0 and the named applications programs in current and future software products." *Apple Computer, Inc. v. Microsoft Corp.*, 709 F. Supp. 925, 931-32 (N.D. Cal. 1989).

In its motion Microsoft also sought an adjudication that the license covers a set of discrete visual displays and that the visual displays in Windows 2.03 are within this set. (Microsoft Memo. filed 2/13/89 at 3.) The Court rejected that claim insofar as it was based solely on the interpretation of the Agreement. Following issuance of the

prior ruling, however, the parties submitted videotapes and other materials directed at a comparison of the visual displays in Windows 1.0 and those in Windows 2.03. HP also moved for partial summary judgment that the license covers discrete visual displays. After further briefing and argument, following distribution to counsel of a prior draft of this memorandum, the Court now makes its rulings on Microsoft's requested adjudication and HP's motion.[1]

The question now before the Court is whether the Agreement, although not a complete defense, is a partial defense against the infringement claim and, if so, to what extent it licenses the visual displays in Windows 2.03 and NewWave.

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[1] At oral argument, counsel for Apple contended *for the first time* that the 1985 Agreement was ambiguous and therefore raised a triable issue of fact, citing this Court's article, *Summary Judgment Under the Federal Rules: Defining Genuine Issues of Material Fact*, 99 F.R.D. 465 (1984). The full passage from which counsel selectively quoted disposes of this argument:

> The interpretation of a written instrument is likewise sometimes an issue of fact and sometimes an issue of law for Rule 56 purposes. While interpreting a writing which the court finds to be unambiguous is clearly a question of law, an issue of fact may be raised by a dispute over the intention of the parties to an unambiguous writing.

99 F.R.D. at 474 (footnotes omitted). Here there is no dispute over historical facts. The self-serving deposition testimony of Apple's witnesses over what they intended by entering the 1985 Agreement does not create an issue of fact; if it did, any party to an agreement could force a trial simply by testifying to a contrary intention. There is no contemporary evidence of the intended meaning of the words "visual displays"; much less is there such evidence of a dispute over their meaning. What the contemporary evidence shows, as discussed in the Court's prior ruling, is that the text proposed by Apple during the negotiations, which would have given it the protection that it now seeks, i.e. the "no more like the Macintosh" limitation, was rejected by Microsoft and different language was agreed on. *See* 709 F. Supp. at 927. The question whether Apple can now impose that limitation on the Agreement is a legal question of interpretation properly decided on summary judgment.

I.

Apple contends that the 1985 agreement was only "a license of the interface of Windows Version 1.0 as a whole, not a license of broken out 'elements' which Microsoft could use to create a different interface more similar to that of the Macintosh." (Apple Memo. 7.) Microsoft and HP contend that the license applies to discrete visual displays in Windows 1.0 individually and, therefore, that Windows 2.03 and NewWave are covered by the license to the extent that they include visual displays found in Windows 1.0.

The language of the 1985 Agreement does not support Apple's restrictive interpretation. The Agreement identifies its subject matter as "*certain visual displays* generated by . . . 'Microsoft Windows Version 1.0'" and five named applications programs. (Microsoft Memo., Ex. A, Agreement, Preamble (emphasis added).) Microsoft acknowledged that these "*visual displays . . . are derivative works* of the visual displays generated by Apple's Lisa and Macintosh graphic user interface programs." (*Id.*, ¶ 1 (emphasis added).)

Apple granted Microsoft a non-exclusive "license to use *these derivative works* in present and future software programs and to license them to . . . third parties." (*Id.*, ¶ 2 (emphasis added).) Microsoft, in turn, granted Apple a non-exclusive license "to use any new visual displays created by Microsoft . . . as part of its Microsoft Windows retail software product." (*Id.*, ¶ 5.)

The Agreement makes clear that the parties did not consider an interface and the visual displays generated by that interface to be synonymous, and that they chose the words of the license deliberately. The word "interface" is used in paragraph one in the context of Microsoft's acknowledgment that the licensed "visual displays . . . are derivative works of the visual displays generated by Apple's Lisa and Macintosh graphic user interface programs." The juxtaposition in that sentence shows that the terms "visual displays" and "interface, " as used in the Agreement, were not regarded by the parties as interchangeable.

Had it been the parties' intent to limit the license to the Windows 1.0 interface, they would have known how to say

so. Instead, the "derivative works" covered by the license are identified as the "visual displays" in the Windows 1.0 interface, not the interface itself. And there is nothing in the 1985 Agreement that indicates that it was intended as a product license restricting Microsoft and its licensees to the use of the Windows 1.0 interface as a whole.

Apple contends that, notwithstanding the absence of any language in the Agreement to this effect, its negotiators understood that the license did not allow Microsoft to develop a new interface more similar to the Macintosh interface. The history of the negotiations, however, shows that Apple tried but did not succeed in obtaining Microsoft's agreement to a limitation of the license to Windows 1.0 taken as a whole, protecting against the development of interfaces more like the Macintosh look and feel. 709 F. Supp. at 927. Instead the parties executed a license to use specified visual displays.

To avoid the plain meaning of the Agreement, Apple seeks to impose a tortured interpretation on the words "visual display, " namely that they serve only to "distinguish the computer code of Windows Version 1.0 from the audiovisual works which the code produced." (Apple Memo. 9.) Apple bases this argument on the fact that the Agreement does not anywhere refer to "individual visual display elements." (*Id.*) The failure of the Agreement to refer to "individual visual display *elements*", however, does not mean that, contrary to the plain meaning of the language of the Agreement, the license is not to use discrete visual displays.[2]

That the license of visual displays from Apple to Microsoft must mean what it says is also confirmed by the

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[2] Apple also contends that the use of the words "visual displays" in the license does "not . . . warrant conversion of the Agreement into a license (whole or partial) for all future products created by Microsoft . . . that arguably could trace some similarity to Windows Version 1.0." (Apple Memo. 9.) Apple is correct: "visual displays" means what it says, no more and no less; the use of those words in the license does not "allow Microsoft to develop future versions of Windows as it pleases, " *see* 709 F. Supp. at 929, and neither does this ruling.

use of the same language in the license from Microsoft to Apple "to use any new visual displays created by Microsoft . . . in [Apple's] software programs." (Microsoft Memo., Ex. A, Agreement ¶ 5.) This license clearly gives Apple the right to use individual visual displays created by Microsoft; Apple is not limited to incorporating the entire interface into its software programs if it wishes to use any new visual display created by Microsoft. This understanding of the effect of the license from Microsoft was shared by Apple's chief negotiator, Eisenstat, who testified that the license allowed Apple to incorporate into its Macintosh interface any "new visual feature" developed by Microsoft for Windows. (Microsoft Memo. 7.)

Furthermore, as pointed out by Microsoft and HP, Apple's current interpretation would render the parties' sublicensing rights worthless. Both Apple and Microsoft rely heavily on third-party programmers to develop applications programs to run under their respective operating environments, thus enhancing the value of the operating environments. Applications programs incorporate a mixture of visual features from the operating environment and new features added by the applications programmers. This necessarily changes the visual displays seen by the user.[3] Under Apple's contention that the licenses extend to the interface as a whole and do not allow deviation from that interface, such selective use of visual features from the operating environment and creation of different visual displays would violate the licenses. An interpretation that leads to such a result is unreasonable.[4]

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[3] As HP points out, if the visual displays were not affected by an applications program, the user could not tell that the program was running, control the program, put information into it, or take information out of it. (HP Memo. 5-6.)

[4] In its comments on the Court's proposed memorandum Apple retreats from this position, stating that deviations from the Windows 1.0 interface would be permissible so long as they did not make "the appearance more similar to Apple's audiovisual works than was Windows Version 1.0." (Written Comments 6.) Of course, such language was

Thus, as stated in the Court's prior ruling, the language of the license "allow[s] Microsoft . . . to use the licensed visual displays in future versions of Windows and in different applications programs, whether then in existence or not." 709 F. Supp. at 929.

Contrary to Apple's suggestion, there is nothing in the copyright law that precludes the grant of such a license to use visual displays and to incorporate them into a new work that also includes new visual displays. A copyright license is a contract like any other contract and the starting point of the analysis must necessarily be the terms of the license. *See Cohen v. Paramount Pictures Corp.*, 845 F.2d 851, 853 (9th Cir. 1988); *see also* 3 M. Nimmer & D. Nimmer, *Nimmer on Copyright* § 10.08 (1988). As stated above, the terms of the 1985 license are clear and unambiguous.

Apple also cites the rule that a licensee infringes the copyright if he significantly alters the licensed work. This rule has no application here because Microsoft is not accused of altering a licensed work; the use of visual displays was licensed, not use of Windows 1.0 as a whole. Moreover, each of the cases on which Apple relies for this proposition involved action by a copyright licensee beyond the scope of the license. *See, e.g., Frank Music Corp. v. Metro-Goldwyn Mayer, Inc.*, 772 F.2d 505, 511-12 (9th Cir. 1985) (performance of musical composition accompanied by visual representations of dramatic work from which music came violated license expressly limited to performing music); *Gilliam v. American Broadcasting Co.*, 538 F.2d 14, 20-21 (2d Cir. 1976) (licensee's unilateral editing of television programs violated express provision of license requiring author's consent for changes). In this case, the license specifically authorized the use of "visual displays generated by [Windows 1.0]" "in present and future software products." (Microsoft Memo., Ex. A, Agreement, Preamble & ¶ 2.) Thus the use of selected visual displays in other programs must

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expressly rejected by Microsoft and is not found in the Agreement. Moreover, its effect would be to give Apple a virtual veto power over all new software products exercisable according to wholly subjective criteria.

necessarily have been intended—if it was not, Microsoft would be exposed to a possible infringement claim whenever it used anything less than the entire Windows 1.0 interface. Such a result cannot be squared with the plain language of the Agreement.

It is, of course, true, as Apple argues, that in determining whether an audiovisual work infringes, the work must be viewed as a whole. But where a work includes licensed features as well as unlicensed features, infringement depends on whether the unlicensed features are entitled to protection; licensed features are treated as being in the public domain. *Cf. Data East USA, Inc. v. Epyx, Inc.*, 862 F.2d 204, 208 (9th Cir. 1988) (substantial similarity of unprotected expression does not support finding of infringement).

In its prior ruling the Court concluded that overlapping windows, as featured in Windows 2.03, are a visual display within the meaning of the 1985 Agreement and are not within the scope of the license. 709 F. Supp. at 929. But overlapping windows, obviously, are not the only visual display in Windows 2.03. And equally obviously, because Windows 1.0 did not have overlapping windows, it must have had other visual displays or else the license would have been an empty gesture. It must be concluded therefore that the Agreement licenses the use of the visual displays in Windows 1.0 and to that extent provides a partial defense to infringement claims based on the use of such visual displays.

II.

The question before the Court, therefore, is which visual displays in Windows 2.03 and NewWave are visual displays licensed under the 1985 Agreement.[5]

The Agreement does not specifically define the term "visual display" and, on the record of these motions, there is no basis for attributing to it a specific, technical meaning. The term should therefore be given a reasonable

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[5] The Court does not address the questions of whether Apple's copyright is valid or, if so, whether any unlicensed visual displays are substantially similar to any of Apple's copyrighted material.

interpretation, consistent with its facial meaning and the purpose of the license to protect Microsoft against infringement claims for using visual displays covered by the Agreement. A visual display necessarily is what the user sees on the screen. In the context of the Agreement it consists of or includes those features to which one would look to assess similarity for purposes of determining whether the copyright has been infringed. *See Data East*, 862 F.2d at 208.

This interpretation is consistent with Apple's prior usage. In its previous summary judgment memorandum, Apple referred to a photograph of a screen display from Windows 2.03 containing three overlapping windows. (Apple Memo. filed 1/27/89 at 17, referring to Apple Appendix filed 1/27/89, Ex. 47.) Apple referred to "all of the visual displays that appear" in this photograph, and then proceeded to list the following: "the window border, the window frame, the menu box outline, the dialog box outline, the scroll bars, check boxes and buttons." (*Id.*)

Apple has submitted a list of 189 "similarities in particular features" between its copyrighted audio visual works and Windows 2.03 and NewWave.[6] (Apple Pretrial Stmt., Ex. A.) Microsoft claims that 178 of the 189 identified features are also features of Windows 1.0 and has submitted a video tape in support of its claim. (Trower Dec. filed 6/9/89, Ex. B (videotape) and Ex. 2 (list of features).) Apple has also submitted a list of 39 differences between the features of Windows 1.0 and those of Windows 2.03, and a videotape demonstrating some of these differences; it does not contend, however, that all of these new features infringe its copyrights.[7] (Exs. A and B to Apple's Memo.) Microsoft contends that twenty-nine of these differences are not

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[6] Apple has identified an additional fifty visual features found only in NewWave that it contends are substantially similar to visual features in the Macintosh user interface.

[7] In fact, some of the items in this list are not found in the Macintosh graphic user interface.

included in Apple's list of similarities between Windows 2.03 and the Macintosh user interface, six relate to the change from tiled to overlapping main application windows, two relate to the changes in the use of icons, and the other two are trivial. (Microsoft Response Memo. 22.)

The Court has reviewed all of the papers and related videotapes submitted by the parties, as well as the exhibits submitted in this and the previous phase of these summary judgment motions.

This review discloses that both Windows 1.0 and Windows 2.03 have many visual displays that are also found in the Macintosh user interface. It also discloses, however, that most visual displays in Windows 2.03 are also in Windows 1.0 and, therefore, are covered by the 1985 license.

The features identified by Apple as potentially infringing fall into six categories: (1) design and appearance of individual main application windows (Apple Pretrial Stmt., Ex A, A-2 through A-7, A-9, C, E); (2) design and appearance of dialog boxes (*id.*, J-O); (3) menu design and appearance (id., F); (4) design and appearance of individual applications programs included with Windows 1.0 and 2.03 (*id.*, P-W); (5) icon design, appearance, and manipulation (id., G); and (6) arrangement and manipulation of multiple main application windows (*id.*, A-1, A-8, B, D). The features in the first four and most of the fifth of these groups are, except for insignificant differences, the same in the two versions of Windows.[8]

1. *Appearance of individual main application windows.* The design and appearance of individual main application windows is essentially unchanged from Windows 1.0 to Windows 2.03. Under both versions of Windows, individual main application windows are bordered rectangles[9] with

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[8] All features in groups H and I and some features in groups F, G, and J are found in NewWave only; HP does not contend that they are covered by the license. They are therefore not affected by this ruling.

[9] Windows 2.03 added a filled border running completely around each window. This feature is not found in Macintosh windows.

title bars at the top, scroll bars on the bottom and right edges, elevator boxes on the scroll bars, a close-box at the left end of the title bar,[10] and a sizing box at the bottom right corner of the window. Scrolling is identical between the two versions. Window sizing is essentially the same: under both versions, a window may be resized by dragging the mouse from the lower right corner of the window and a grey outline of the window follows the mouse. Although the default colors of the various components of the windows are different between the two versions, this is not a significant change. Where Windows 1.0 has a sizing box at the right end of the title bar, Windows 2.03 has two zoom arrows; however, the Macintosh has neither of these features.

2. *Dialog boxes.* Both versions of Windows use dialog boxes that may overlap the main application windows and that contain checkboxes, radio buttons, and rectangular buttons. The appearance of these items is essentially the same between the two versions. Microsoft changed the label of a standard button that appears in all dialog boxes from "Ok" to "OK"; although the Macintosh also uses "OK, " this change is not significant. Minor changes were made in the underlining of button labels, but this feature is not found in the Macintosh graphic user interface.

3. *Menus.* Menu design and appearance is essentially the same in both versions of Windows. A horizontal bar, called the menu bar, extends across the top of each main application window. This bar contains a left-justified list of menu names. When a menu name is selected with the mouse, a pull down menu appears below the menu name. The pull down menu contains a vertical list of menu items which can be selected with the mouse. Windows 2.03 indicates keyboard accelerators, which allow the user to choose a menu item from the keyboard without using the mouse, by underlining; Windows 1.0 does not have this feature, but neither does the Macintosh.

4. *Applications programs.* Both versions of Windows come with a package of applications programs including a

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[10] The appearance of the close-box was changed slightly.

text editor, paint program, file management program, database management program, clipboard, clock, and calculator. All of these programs are essentially the same in both versions of Windows. The only feature of these programs that Apple identifies as being different is that Windows 1.0 allows the user to change the size of the calculator window but Windows 2.03, like the Macintosh, does not. This, however, does not involve different visual displays.

5. *Icons.* In both versions of Windows, a main application window may be collapsed into an icon which can be moved around the screen with the mouse. Both versions of Windows also allow the user to open an icon into its associated window.

Microsoft made some changes in its use of icons between Windows 1.0 and Windows 2.03. Windows 1.0 allows icons to be stored only in a special field at the bottom of the screen; Windows 2.03, like the Macintosh, allows icons to be stored anywhere on the screen in front of or behind open windows. In Windows 1.0 the name of an icon, when displayed, is above the icon; in Windows 2.03 the name of an icon, when displayed, is below the icon.[11] These changes in the appearance and use of icons are not covered by the 1985 license.

6. *Representation of multiple main application windows.* As the Court noted in its prior Order, the main change from Windows 1.0 to Windows 2.03 was the change from a tiled display of multiple main application windows to an overlapping display. This change had a direct effect on the appearance and manipulation of windows and required many changes in visual displays.

In the tiled windowing system used in Windows 1.0, all open main application windows are visible to the user and are arranged side by side, like tiles on a floor. The screen is always entirely filled by whichever windows happen to be open at any given time. When one window is opened, closed,

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[11] In Windows 2.03, when an icon is at the bottom of the screen, its name, when displayed, overlaps the icon.

moved, or resized, all other windows must be redrawn to accommodate the change.

In an overlapping window system such as is used in Windows 2.03 and in the Macintosh graphic user interface, open main application windows are overlapped, appearing like papers loosely stacked on a desk. The active window is automatically moved to the top of the stack. Because the open windows overlap, each window may be sized and moved independently of all other windows. When one window is opened, closed, moved, or resized, all other windows remain the same except to the extent that previously visible portions are covered and previously covered portions are revealed.

The changes in visual displays from Windows 1.0 to Windows 2.03 necessary to implement the overlapping windows system are not covered by the 1985 license.

CONCLUSION

For the foregoing reasons, the Court holds

(1) that the use of visual displays in Windows 2.03 that are in Windows 1.0 and the named applications programs is licensed by the 1985 Agreement;

(2) that the visual displays used in Windows 2.03 are in Windows 1.0 and the named applications programs except for those relating to the use of overlapping main application windows, as opposed to tiled main application windows, and except for the specified changes in the appearance and manipulation of icons; and

(3) that Microsoft and its licensee HP are therefore entitled to partial summary judgment on Apple's infringement claim insofar as it is based on the use in Windows 2.03 and in NewWave of visual displays in Windows 1.0 and the named applications programs.

Accordingly, this ruling constitutes a summary adjudication that defendants' use in Windows 2.03 and in NewWave of the visual displays in Windows 1.0 and the named applications programs is protected against Apple's infringement claim by the license provision in the 1985 Agreement. In the case of Windows 2.03, this applies to all visual displays except the use of overlapping main

application windows and the specified changes in the appearance and manipulation of icons.

The Court will therefore now proceed to determine whether the use of those unlicensed visual displays in combination with licensed visual displays infringes Apple's audiovisual copyrights.

Counsel shall meet and discuss how that determination may be expeditiously and properly made. A status conference will be held on September 8, 1989 at 10:00 a.m.

IT IS SO ORDERED.

APPLE COMPUTER, INC., a California corporation,
Plaintiff,
v.
MICROSOFT CORPORATION, a Delaware corporation, and HEWLETT PACKARD COMPANY, a California corporation, Defendants.

No. C 88-20149-VRW

United States District Court,
N.D. California

March 6, 1991

ORDER ON CROSS MOTIONS FOR SUMMARY ADJUDICATION

WALKER, District Judge:

Apple Computer, Inc. ("Apple") filed this copyright infringement action on March 17, 1988, against Microsoft Corporation ("Microsoft") and Hewlett-Packard Company ("HP"), claiming that Microsoft's Windows computer operating system software and HP's NewWave computer application software infringed Apple's copyrights. The copyrights at issue protect the visual displays of Apple's Macintosh computer user interface.

I. *THE VISUAL DISPLAYS OF THE MACINTOSH INTERFACE.*

In developing the Macintosh computer operating system software, Apple made one of the major commercial breakthroughs of the 1980's. The graphic user interface generated by the Macintosh system software consists of windows, icons, pull-down menus, and other images or visual displays projected on the computer screen. The Macintosh

user interface[1] proved so intuitive that users were able fairly quickly to learn how to manipulate the screen displays and mouse and thus accomplish what had theretofore been the daunting task of learning to operate a computer. This breakthrough vaulted Apple to the top of the personal computer industry.

The visual displays in a computer user interface owe their appearance to system software and application programs. System software is a computer program that controls the computer hardware and schedules the execution of its functions. Such software is keyed to the computer hardware which it runs and establishes the visual framework or environment for the images on the computer screen, as does a proscenium in a theatre. In order to put a computer to a specific task, however, the user also needs an application program—to further the stage analogy, the play. Application programs must be keyed to a particular system software and work within that system's framework or environment to carry out a specific application or task, e.g., word processing, accounting, and charting.

The obvious difference between a stage play and a computer interface is that in the latter, the user directs the action. The "user friendliness" of the Macintosh interface gave Apple a competitive edge over other personal computer manufacturers.

The commercial success of the Macintosh user interface and competition produced by Microsoft's analogous Windows Version 1.0 system software for IBM and IBM-compatible personal computers spawned a dispute between Apple and Microsoft over the rightful ownership of visual displays in this interface. The parties' dispute extended to ownership of visual displays in Microsoft Windows Version 1.0, and certain application programs: Microsoft Multiplan and

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[1] This case deals only with the graphic elements or visual displays of the Macintosh user interface. The whole Macintosh user interface includes both its graphic elements or visual displays and the mouse technology which enables the user to point on these graphic elements and command some computer operation.

Microsoft Excel, both spread-sheet programs; Microsoft Chart, a graphics program; Microsoft File, a database program; and Microsoft Word, a word processing program.[2] On November 22, 1985, Apple and Microsoft entered into an agreement ("1985 Agreement") to settle this dispute. The effect of that agreement upon the parties' rights was the first matter which the Honorable William W Schwarzer, to whom this case was previously assigned, sought to determine.

The 1985 Agreement provided that: (1) Microsoft acknowledged that the visual displays in the Microsoft Windows Version 1.0 operating system and the disputed application programs were derivative works of the visual displays generated by Apple's Macintosh operating system and that of an earlier Apple effort, the Lisa; (2) Apple granted to Microsoft a non-exclusive, royalty-free, nontransferable license to use these derivative visual displays in present and future software programs and to license them to third parties for use in new software programs; (3) Microsoft agreed not to offer a new application program similar in function to Microsoft Excel prior to October 1, 1986; (4) Apple waived any copyright, patent, trade secret or other claim it may have as to Windows Version 1.0; (5) Microsoft granted to Apple a non-exclusive, royalty-free, nontransferable license to use any new visual displays created by Microsoft during the next five years as part of the Microsoft Windows retail software products; and (6) Microsoft agreed to revise Microsoft Word, which operates on the Macintosh operating system, by enhancing and improving that program by July 31, 1986.

Relying on this agreement, Microsoft apparently granted HP a license to use the Microsoft Windows system software in the development of what came to be known as HP's NewWave application program. Sewell Declaration with Appendix in Support of Apple's Summary Judgment Motion, Exh. 39. After learning of the HP NewWave application

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[2] Microsoft developed Multiplan, Chart and File under an earlier agreement with Apple.

program and evidently fearing that Microsoft's licensing activities would soon diminish the Macintosh competitive advantage, Apple filed this lawsuit.

Apple's complaint alleged three claims: (1) copyright infringement of Apple's audiovisual works by HP's NewWave and Microsoft's Windows Version 2.03; (2) contributory infringement against Microsoft for licensing Apple's visual displays to HP; and (3) unfair competition. Microsoft and HP asserted a variety of affirmative defenses, including two addressed in this order: Apple's allegedly fraudulent procurement of its copyrights and the asserted lack of originality of the Macintosh graphic user interface.

By orders dated March 20 and July 25, 1989,[3] Judge Schwarzer summarily adjudicated that: (1) the 1985 Agreement was not a complete defense to Apple's claim of copyright infringement; (2) the 1985 Agreement granted Microsoft a license to use in current and future software products the visual displays in Windows Version 1.0 and the five named Microsoft application programs; and (3) the visual displays in Windows 2.03 are in Windows 1.0 and the named application programs except for those relating to the use of overlapping main application windows and to certain changes in the appearance and manipulation of icons. Judge Schwarzer granted Microsoft partial summary judgment on Apple's infringement claim to the extent that Windows 2.03 and NewWave used visual displays that had appeared in Windows Version 1.0 and the five application programs named in the 1985 Agreement. 717 F. Supp. at 1435. Such visual displays were protected from Apple's infringement claims by virtue of the 1985 Agreement's licensing provisions. In reaching this conclusion, Judge Schwarzer rejected Apple's contention that the 1985 Agreement forbade Microsoft from developing in later system software an overall visual appearance more similar to that of the Macintosh than Windows Version 1.0. 717 F. Supp. at 1431. Judge Schwarzer determined that the 1985 Agreement

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[3] *Apple Computer, Inc. v. Microsoft Corp.*, 709 F. Supp. 925, 717 F. Supp. 1428 (N.D. Cal. 1989).

licensed only those visual displays in Windows Version 1.0 and the five application programs named therein. 717 F. Supp. at 1435.

Judge Schwarzer's approach entailed analysis of the works' discrete "visual displays."[4] Pursuant to Judge Schwarzer's direction, Apple identified 189 Macintosh visual displays which it claimed appear in Windows Version 2.03 and NewWave.[5] Judge Schwarzer reorganized these visual displays into six categories and decided that with respect to Windows Version 2.03, all visual displays except the use of overlapping application windows and certain changes in the appearance and manipulation of icons were protected from Apple's infringement claims by virtue of the 1985 Agreement.[6] 717 F. Supp. at 1433 - 35.

By an order to which the parties stipulated during Judge Schwarzer's supervision of the litigation, this court limited the current phase of litigation to issues regarding the validity and scope of Apple's copyrights in the works in suit and whether any of the ten remaining visual displays are licensed under the 1985 Agreement between Apple and Microsoft.

Presently before the court are: (1) Microsoft's motion for partial summary judgment, seeking a determination that seven of the ten remaining visual displays from Apple's List are licensed by the 1985 Agreement, and that none of the remaining ten features is protectible expression within the scope of any of Apple's copyrights; (2) HP's motion seeking partial summary adjudication that: (a) each of the 50

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[4] The term "visual displays" comes from the 1985 Agreement. *See* Appendix to Microsoft's Memorandum in Support of Motion for Partial Summary Judgement, Exh. K.

[5] Apple's document entitled "Similarities between Apple's Copyrighted Audiovisual Works and Microsoft's Windows 2.03 and Hewlett-Packard's NewWave" shall hereinafter be referred to as "Apple's List."

[6] This holding did not affect the visual displays which Apple claimed are found only in NewWave. 717 F. Supp. at 1433 n. 8.

remaining items[7] on Apple's list of similarities applicable to NewWave is not original; (b) each of the remaining items does not constitute protectible expression under copyright law; or (c) the scope of protection for such items is so narrow that only virtually identical copying can constitute infringement; and (d) 11 of the remaining 50 items are licensed visual displays under the 1985 Agreement and are protected against Apple's claim of copyright infringement; and (3) Apple's motion for partial summary adjudication that Apple's audiovisual copyrights are valid and the Microsoft and HP affirmative defenses should be dismissed.

Implicit in Judge Schwarzer's approach to the case is a rejection of Apple's fundamental contention that the "total concept and feel" of the Macintosh graphic user interface is protectible expression. Rather, Judge Schwarzer's approach appears to have been to exclude licensed visual displays prior to applying the substantial similarity of idea and expression tests. The undersigned has considered a different approach to the litigation from that adopted by Judge Schwarzer, one that would not begin by an attempt to parse the visual displays of the Macintosh system software. However appealing such an approach might seem in the abstract, the 1985 Agreement appears to license individual visual displays rather than an overall "total concept and feel."[8] After lengthy consideration, the undersigned has concluded that Judge Schwarzer correctly began his analysis of the issues in the litigation with the 1985 Agreement. The court thus turns to the motions directed to the remaining issues involving the 1985 Agreement.

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[7] Although HP correctly states that there are fifty visual displays on Apple's List which pertain only to NewWave, there are additional visual displays on Apple's List which refer to both NewWave and Windows 2.03.

[8] An evaluation of whether the "total concept and feel" of the works is substantially similar should occur after unprotectible elements of expression have been identified and excluded from consideration. *See Data East USA, Inc. v. Epyx, Inc.*, 862 F.2d 204, 208 (9th Cir. 1988).

II. *MICROSOFT'S MOTION FOR PARTIAL SUMMARY JUDGMENT.*

In his July 25, 1989 order,[9] Judge Schwarzer found that particular changes in the appearance and use of icons, namely, the storage of icons anywhere on the screen rather than just at the bottom of the screen, the display of the icon's name below the icon, and changes in visual displays necessary to implement the overlapping windows system, were not licensed under the 1985 Agreement. 717 F.Supp. at 1433-1435. The remaining visual displays are:

A1 overlapping windows in front of a muted background;

A8 windows appearing partly on and off screen;

B1 top overlapping window displayed as the active window;

B2 window brought to top of stack when mouse clicked;

D1 gray outline of window dragged along with cursor when mouse pressed on window's title bar;

D2 window dragged to a new position when the mouse is released after dragging the window's outline;

D3 newly exposed areas on screen are redisplayed after the window is moved;

G4 icon may be moved to any part of screen by dragging along with cursor when user presses mouse on icon;

G5 display of icons on screen behind any open windows;

G6 icon's title displayed beneath icon; and

In support of its contention that seven of the remaining visual displays (A1, A8, B1, B2, D1, D2, D3) are licensed, Microsoft has submitted a videotape, Exhibit H, which shows that each of the seven visual displays appeared in the 1985 version of Microsoft Excel. Microsoft argues that any visual displays in Windows Version 1.0 and the five application programs developed by Microsoft (Word, Chart,

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[9] *Apple Computer, Inc. v. Microsoft Corp.*, 717 F. Supp. 1428 (N.D. Cal. 1989).

File, Excel, and Multiplan) are licensed under the 1985 Agreement and, hence, are protected from Apple's claims of copyright infringement.

Apple contends that each of the Microsoft application programs developed for the Macintosh computer owes its distinctive Macintosh-like appearance to the Macintosh system software without which the application programs could not run. The visual displays which appear on the screen when an application program is running on a Macintosh computer are generated by the interaction between the Macintosh system software and the application program. Therefore, contends Apple, the only visual displays in the five named application programs which are licensed under the 1985 Agreement are those which are created by the code of the Microsoft application programs, not those generated by application calls to the Macintosh system software. The visual displays which are generated by the Macintosh system software include the window frames, moving animation, and the redisplay of those portions of the screen exposed by a window which has been moved. The visual displays which are generated by the Microsoft Excel application program are the contents of the windows. Capps Supp. Decl. ¶¶ 3, 4 and Exh. 1:

The issue of which visual displays are generated by the Microsoft application programs and which by the Macintosh system software was raised earlier before Judge Schwarzer, in a slightly different context. In his March 20, 1989 Order, Judge Schwarzer declined to consider whether the visual displays in issue were generated by the Microsoft application programs or by the Macintosh system software. The point arose in connection with Microsoft's argument that the 1985 Agreement licensed to Microsoft all visual displays that could possibly be called up by running the five Microsoft application programs on the Macintosh system software then or in the future. 709 F. Supp. at 929. Judge Schwarzer concluded that Microsoft's contention would "defy common sense." *Id.*

Microsoft refers to the depositions of Albert Eisenstat, Apple's Senior Vice President, and John Sculley, Apple's

President and CEO, in which these negotiators of the 1985 Agreement did not remember discussing the distinction between visual displays generated by the Microsoft application software code and those generated by the Macintosh system software code. Appendix to Microsoft's Reply to Apple's Response to Microsoft's Motion for Partial Summary Judgment. Furthermore, Microsoft contends that it would have been extremely difficult for the negotiators of the 1985 Agreement to determine which visual displays were attributable to which program codes because such information would require a detailed analysis of the images created by each software program.

Apple contends that: (1) the controversy which resulted in the 1985 license related entirely to Microsoft Windows Version 1.0; (2) Apple did not present any complaint formally or informally regarding any of the Microsoft application programs; and (3) Microsoft's Chairman Gates repeatedly explained that he sought confirmation of Microsoft's ownership of the visual displays in only those application programs that Microsoft created and owned. Apple's Response to Defendants' Motions for Partial Summary Judgment at 10.

Under California law, ambiguities in a written agreement are to be interpreted against the drafter, in this case, Microsoft. *See S.O.S., Inc. v. Payday, Inc.*, 886 F.2d 1081, 1088 (9th Cir. 1989) (citing *Heston v. Farmers Ins. Group*, 160 Cal. App. 3d 402, 415, 206 Cal. Rptr. 585 (1984)); *Interpetrol Bermuda Ltd. v. Kaiser Aluminum Int'l Corp.*, 719 F.2d 992, 998 (9th Cir. 1983).

Moreover, the Ninth Circuit has directed district courts to interpret copyright licenses narrowly, consistent with the federal copyright policy of providing incentives in the form of copyright protection to authors. *See S.O.S. Payday*, 886 F.2d at 1088 ("copyright licenses are assumed to prohibit any use not authorized"); *Cohen v. Paramount Pictures Corp.*, 845 F.2d 851, 854 (9th Cir. 1988). In *S.O.S. v. Payday*, the court concluded that a software developer's grant of a "right of use" of several software programs to a company which provided financial services to clients did not confer the right

to copy and prepare a modified version of the software programs without the licensor's permission. The court concluded that the licensee had only acquired the right to possess copies of the software programs for purposes of producing a product for its clients, and, therefore, had exceeded the scope of its license. Similarly, the *Cohen* court construed a license of a copyrighted work narrowly. *Cohen* involved a license to record and copy a motion picture and exhibit it "by means of television," which was construed not to include the distribution of videocassettes for home viewing, VCRs for home use not having been invented at the time the license was executed.

In light of these rules of construction and the 1985 Agreement's purpose to resolve the dispute over ownership of visual displays in Windows Version 1.0, the court concludes that the 1985 Agreement did not license the visual displays which are generated by calls from the Microsoft application programs to the Macintosh operating system. The mere fact that the Macintosh system software was designed so that the Macintosh interface could be used in conjunction with a variety of application programs written for the Macintosh computer,[10] should not open the door to a construction at odds with usual principles of contract law and the agreement's evident purpose. It would be astonishing if Apple had licensed those visual displays which had won for it great acclaim for aesthetic and intuitive appeal.

What Microsoft received in the 1985 Agreement was the right to continue to market its application programs written for the Macintosh and to use the visual displays generated by those application programs (not the visual displays generated by calls by the application programs to the Macintosh operating system) in present and future programs.

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[10] By permitting application programs to call upon the Macintosh system software to generate visual displays, the Apple software developers simplified the task of writing application programs for the Macintosh computer.

Although seven of the eleven remaining visual displays from Apple's List (A1, A8, B1, B2, D1, D2, and D3) do appear on the screen when the Microsoft Excel application program runs in conjunction with the Macintosh operating system, each of those seven visual displays owes its appearance to the Macintosh operating system. Capps Supp. Declaration. Therefore, those seven visual displays are not licensed under the 1985 Agreement. Microsoft's motion for summary adjudication that these displays are covered by virtue of being in the 1985 version of Microsoft Excel is, therefore, denied.

III. *HP'S MOTION FOR PARTIAL SUMMARY JUDGMENT.*

As to the scope of the 1985 Agreement, HP contends that eleven of the fifty visual displays in Apple's List are covered by the 1985 Agreement and, therefore, are protected from Apple's claims of copyright infringement. These visual displays are: I3, I5, I10, I11, I12, F18, F19, G10, G19, G20, and G22.

A determination of the legal significance of undisputed historical facts, such as the visual displays in Windows Version 1.0 and NewWave, involves a mixed question of fact and law normally decided by the court and, therefore, appropriate for summary judgment. *See Cohen*, 845 F.2d at 853, 855 (reversal of summary judgment in favor of licensee).

As a preliminary matter, HP's motion for summary adjudication rests on the assumptions that the 1985 Agreement granted Microsoft the right to use and license to third parties visual displays in Windows Version 1.0 and that HP is entitled to use those visual displays by virtue of a license from Microsoft to HP. The first assumption is plainly justified by Section 2A of the 1985 Agreement. Strangely, the second assumption is questionable. HP has not established the terms of the Microsoft-HP license. Absent such an agreement, HP has no right to rely on the 1985 Agreement between Microsoft and Apple as a defense to copyright infringement. Because the parties proceeded with two summary judgment motions without clarifying this issue and there are letters referring to a license between

Microsoft and HP,[11] the court can only assume that Microsoft did license the use of visual displays in Windows Version 1.0 to HP. The court is confident that the lawyers for these parties will be heard from if this is not the case and shall thus address the merits of HP'S motion.

After reviewing the videotape exhibits submitted on this issue and comparing the appearance of these eleven visual displays in Apple's programs and in Microsoft Windows Version 1.0, the court drew the following conclusions.

Items I3, I5, I12, F18, F19, and G22 on Apple's List are all present in Windows Version 1.0 and hence are covered by the 1985 License.

Item I10 is licensed insofar as Windows Version 1.0 contains a "Select All" item in the Edit pull-down menu which allows the user to select all text in the window and display that text in reverse video. To the extent that the Windows Version 1.0 "Select All" item does not permit selection by reverse video of any icons, the "Select All" item is not licensed.

Item I11, a menu called "View" which presents the user with a number of menu items allowing the user to choose the folder's window display as icons or as a tabular list by name, type, or modification date, is licensed except insofar as Windows Version 1.0's "View" pull-down menu does not offer the user the option to display a folder's contents as icons in the window.

Item G19, selection of an icon by changing both the icon and its name into reverse video, is not licensed because in Windows Version 1.0 only disk drive icons and their names, which are not aligned directly below, can be selected by reverse video. The appearance of selecting only disk drive icons by reverse video in Windows Version 1.0 is significantly different from the selection of the variety of icons in the Macintosh and NewWave programs.

Items G10 and G20 do not appear to be licensed, but the association of different icon images with different types of objects and the use of a mouse to move icons around on a

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[11] Sewell Declaration with Special Appendix, Exh. 39 and 40.

screen appear to be ideas. For purposes of the current motion, the court finds only that items G10 and G20 are not covered by the 1985 Agreement. The idea/expression distinction is properly raised in connection with the issue of substantial similarity, which is not presently before the court.

Therefore, the court concludes that items I3, I5, I12, F18, F19, and G22 on Apple's List are licensed to Microsoft pursuant to the 1985 Agreement and, assuming that Microsoft licensed the use of these visual displays to HP, are protected from Apple's claim of copyright infringement.

The following items on Apple's List are unlicensed and pertain to NewWave: A1, A8, B1, B2, D1-3, G1, G2, G4, G5, G6, G10-33, H1-6, I1, I2, I4, I6-11, J8-11 (55 items total).

IV. *APPLE'S MOTION FOR PARTIAL SUMMARY JUDGMENT CONCERNING VALIDITY OF ITS COPYRIGHTS AND DEFENDANTS' AFFIRMATIVE DEFENSES.*

Apple's motion seeks summary adjudication declaring Apple's audiovisual copyrights valid and dismissing defendants' affirmative defenses. Following lengthy consideration, the court has concluded that the present record is insufficient to conclude that there are no triable issues of fact as to these matters, with two exceptions: (1) HP's claim of Apple's fraud on the Copyright Office, and (2) the originality of Apple's visual displays.

To prevail on a claim of copyright infringement, a plaintiff must establish both ownership of a valid copyright and copying by the defendant. *Data East USA, Inc. v. Epyx, Inc.*, 862 F.2d 204, 206 (9th Cir. 1988); *Sid & Marty Krofft Television Prod., Inc. v. McDonald's Corp.*, 562 F.2d 1157, 1162 (9th Cir. 1977); *Atari, Inc. v. North American Philips Consumer Elec. Corp.*, 672 F.2d 607, 614 (7th Cir. 1982); *see* M. Nimmer, 3 THE LAW OF COPYRIGHT § 13.01 (1990). Because direct evidence of copying is rare, copying may be established by circumstantial evidence of access and substantial similarity of ideas and the expression between the copyrighted work and the alleged infringing work. *Data East*, 862 F.2d at 206.

Apple seeks partial summary judgment on the first issue—the validity of its copyrights on the Lisa and Macintosh programs and also asks the court to strike the defendants' affirmative defenses.[12] In support of its motion, Apple refers to the transcript of the April 14, 1989 Status Conference, at 13-14, in which counsel for Microsoft and HP stipulated to the presumptively valid copyright registration of Apple's works in issue. Apple's complaint listed the allegedly infringed works and the copyright registration numbers. In Microsoft's answer, Microsoft admitted that Apple received the certificates of registration for the works in suit. Microsoft's Answer, ¶ 10.

A certificate of registration from the Copyright Office constitutes "prima facie evidence of the validity of the copyright and of the facts stated in the certificate." 17 U.S.C. § 410(c).[13] This presumption of validity is

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[12] Microsoft's affirmative defenses are: (1) Apple granted Microsoft a royalty-free license to use the visual displays in issue pursuant to the 1985 Agreement; (2) Apple is precluded by waiver or estoppel from any claims of ownership or infringement against Microsoft products; (3) Apple has failed to state a claim for contributory infringement; (4) Apple's visual displays are functional and hence barred from copyright protection under 17 U.S.C. § 102(b); (5) Apple's visual displays are not original to Apple and are not entitled to copyright protection under 17 U.S.C. § 102(a); (6) Apple's visual displays are common and ordinary expressions of unprotectible ideas and are not susceptible to copyright protection under the *scenes a faire* doctrine of copyright law; (7) no substantial similarity exists between Apple's visual displays and Microsoft's Windows 2.03 software product; and (8) Apple's claim of unfair competition is preempted by 17 U.S.C. § 301.

HP's affirmative defenses are: (1) Apple's visual displays are unprotectible ideas, indispensable expression, and/or non-original expression; (2) fraud on the Copyright Office; (3) Apple's visual displays are functional; and (4) Apple's works are entitled to a limited scope of copyright protection.

[13] Section 410(c) provides:

> In any judicial proceedings the certificate of a registration made before or within five years after first publication of the work shall constitute prima facie evidence of the validity of the copyright and of the facts stated in the certificate. The evidentiary weight to be

rebuttable. *Durham Indus., Inc. v. Tomy Corp.*, 630 F.2d 905, 908 (2d Cir. 1980) (evidence in the record casting doubt on validity rebuts presumption); *Past Pluto Prod. Corp. v. Dana*, 627 F. Supp. 1435 (S.D.N.Y. 1986). The presumptive validity of a certificate of registration may be resolved on summary judgment. *S.O.S. v. Payday*, 886 F.2d at 1086 (citing *Seiler v. Lucasfilm, Ltd.*, 808 F.2d 1316, 1322 (9th Cir. 1986)). Furthermore, the presumption of copyright validity may not be overcome on the basis of fraud without proof that omissions in copyright application were intentional. *Eckes v. Card Prices Update*, 736 F.2d 859 (2d Cir. 1984). HP opposes Apple's motion seeking a determination of validity of Apple's certificates on two grounds: fraud on the Copyright Office and lack of originality.[14]

A. Fraud on the Copyright Office.

HP contends that Apple's failure to disclose to the Copyright Office that its works were based upon preexisting works should overcome the presumption of validity of Apple's copyright registrations. HP has provided the court with depositions and computer magazine articles showing that the Apple Lisa/Macintosh graphic user interface was strongly influenced by the Xerox programs, Smalltalk and Star. While it is undisputed that the Lisa and Macintosh designers were influenced by Xerox's Smalltalk program, which used a mouse and overlapping windows, and by Xerox's Star workstation, which extensively used icons, such borrowing of ideas does not deprive Apple's works of their presumption of copyright validity. To require a designer of a computer graphic user interface to acknowledge sources of artistic influence would be similar to expecting Roy Lichtenstein to declare in a copyright registration that a particular work is derivative of a named comic strip. HP's contention that Apple's failure to disclose the borrowed

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accorded the certificate of a registration made thereafter shall be within the discretion of the court.

[14] Microsoft also contests the originality of Apple's works.

Xerox material is in itself adequate to overcome the presumption of validity is unsupported by any binding precedent. Furthermore, "[a]bsent intent to defraud and prejudice, inaccuracies in copyright registration do not bar actions for infringement." *Harris v. Emus Records Corp.*, 734 F.2d 1329, 1335 (9th Cir. 1984). HP has not provided the court with any evidence of Apple's intent to deceive the Copyright Office and nevertheless claims that "a triable issue of fact as to Apple's intent remains, and summary judgment cannot be granted to Apple on the record now before the Court." HP's Opposition to Apple's Motion for Partial Summary Judgment at 15-16.

The parties have recently sent letter briefs to the court regarding the December 11, 1990 decision and order in *Ashton-Tate Corp. v. Fox Software, Inc.*, No. CV 88-6837 TJH, ___ F. Supp. ___ (C.D. Cal. filed Dec. 12, 1990). HP relied on the legal conclusion that Ashton-Tate's failure to disclose that its programs were derived from a computer software program in the public domain invalidated Ashton-Tate's copyrights on its dBase line of computer software programs.[15] This court finds the two-page *Ashton-Tate* decision unhelpful to the resolution of the pending motions.

HP's contention that Apple's copyrighted works are derivative works is meritless. A derivative work is one which is substantially copied from a prior work. *Litchfield v. Spielberg*, 736 F.2d 1352, 1357 (9th Cir. 1984), *cert. denied* 470 U.S. 1052, 105 S. Ct. 1753, 84 L. Ed. 2d 817 (1985). The Ninth Circuit has stated that a work will be deemed a derivative work "only if it would be considered an infringing work if the material which it has derived from a prior work had been taken without the consent of a copyright

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[15] HP's assertion in its letter brief that it has not yet taken any discovery on the subject of Apple's inequitable intent does not preclude summary adjudication of that issue. HP has had ample time to conduct discovery on the issues of the originality and validity of Apple's copyrights on the works in suit, including intent to deceive the Copyright Office. Judge Schwarzer afforded HP that opportunity.

proprietor of such prior work." *Id.* at 1357 (quoting from *United States v. Taxe*, 540 F.2d 961, 965 n. 2 (9th Cir. 1976)). All works are derived to a certain degree from preexisting works. A derivative work within the meaning of the copyright law, however, is one which substantially borrows the expression of ideas from an existing work. M. Nimmer, 1 THE LAW OF COPYRIGHT § 3.01 (1990). HP has provided no evidence demonstrating that Apple's works in suit could be considered to have infringed Xerox's copyrights or that Apple's works substantially borrowed expressions of ideas from Xerox's Smalltalk or Star programs.

The purpose of summary judgment is to pierce the pleadings and assess the proof to determine whether a genuine need for trial exists. Advisory Committee Note to 1963 Amendment of Fed. R. Civ. P. 56(e). "There is no issue for trial unless there is sufficient evidence favoring the nonmoving party for a jury to return a verdict for that party." *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 249, 106 S. Ct. 2505, 2511, 91 L. Ed. 2d 202 (1986). Although inferences are to be drawn in favor of the nonmoving party, where the moving party has carried its burden under Fed. R. Civ. P. 56(c), the nonmoving party "must do more than simply show that there is some metaphysical doubt as to the material facts." *Matsushita Elec. Industrial Co. v. Zenith Radio*, 475 U.S. 574, 586, 106 S. Ct. 1348, 1356, 89 L. Ed. 2d 538 (1986). Having reviewed the exhibits offered in connection with this issue, the court concludes there can be no triable issue that the Apple works in suit substantially borrowed expressions of ideas from Xerox's Smalltalk or Star programs.

Finding no evidentiary basis for HP's claim that Apple intended to commit a fraud on the Copyright Office and finding that the Apple visual displays are not derivative of the Xerox Star or Smalltalk programs, the court concludes that HP has failed to establish that Apple perpetrated a fraud on the Copyright Office.

B. Originality of Apple's visual displays.

HP disputes that Apple's copyrighted works were wholly original to Apple because those works are "at best derivative of the works of Xerox and others and more likely merely compilations of preexisting uncopyrightable material." HP's Opposition to Apple's Summary Judgment Motion, at 3.

The attacks of Microsoft and HP on the validity of Apple's copyrights on the basis of lack of originality misconstrue the copyright requirement of originality. The standard of originality required for copyrightability is minimal. *See Atari Games Corp. v. Oman*, 888 F.2d 878 (D.C. Cir. 1989) (minimal degree of creativity required to support a copyright). To fulfill the originality requirement, a work need only be independently created by the author and embody a very modest amount of intellectual labor; novelty or uniqueness is not essential. *Baltimore Orioles, Inc. v. Major League Baseball Players Ass'n.*, 805 F.2d 663, 668 (7th Cir. 1986), *cert. denied* 480 U.S. 941, 107 S. Ct. 1593, 94 L. Ed. 2d 782 (1987); *West Pub. Co. v. Mead Data Cent., Inc.*, 799 F.2d 1219, 1223 (8th Cir. 1986), *cert. denied* 479 U.S. 1070, 107 S. Ct. 962, 93 L. Ed. 2d 1010 (1987). It has been said that the originality requirement is simply a prohibition of actual copying by the copyright holder. *Atari Games Corp.*, 888 F.2d at 882; *M. Kramer Mfg. v. Andrews*, 783 F.2d 421, 437 (4th Cir. 1986).

In *Johnson Controls, Inc. v. Phoenix Control Systems*, 886 F.2d 1173 (9th Cir. 1989), the court concluded that the existence of computer programs similar to plaintiff's program was insufficient to rebut the presumption of validity absent any evidence that plaintiff copied from the other programs. Similarly, although there is evidence that Apple's designers borrowed ideas from Xerox's Smalltalk and Star programs, there is no substantiation for the allegation that Apple copied protectible elements of expression from those programs. Indeed, photocopies of visual displays from the Smalltalk and Star programs within the parties' exhibits reveal scant similarity of expression between Xerox's and Apple's visual displays. HP's Documentary and Testimonial Evidence in Support of Motion for Summary Judgment, Exh. 222, 227, 237, 264, 361.

There being no triable issue of fact regarding fraud on the Copyright Office or lack of originality of Apple's works in suit, Apple's motion for partial summary judgment that: (1) Apple did not perpetrate a fraud on the Copyright Office; and (2) Apple's works in suit fulfill the copyright requirement of originality, is granted. Apple's motion for summary adjudication that its copyrights are valid is denied without prejudice to renewal. Accordingly, HP's affirmative defense regarding fraud on the Copyright Office and both HP and Microsoft's affirmative defenses of lack of originality are dismissed from the case. HP and Microsoft's defenses to infringement, such as functionality, scope of protection, merger and *scenes a faire* doctrines remain in issue and would be appropriately discussed in connection with an adjudication regarding substantial similarity.

V. *REMAINING ISSUES.*

Microsoft and HP have asked the court for a determination that each of the remaining visual displays on Apple's List is not entitled to copyright protection because they are unprotectible ideas, *scenes a faire*, or expressions which are merged with or indispensable to the ideas they represent. Under Ninth Circuit precedent, it appears that the issue of merger of idea and expression can preclude a finding of substantial similarity, but has not been applied to the issue of the copyrightability of a work. *NEC Corp. v. Intel Corp.*, 10 U.S.P.Q.2d 1177, 1179 (N.D. Cal. 1989); *see Data East*, 862 F.2d at 208; *Frybarger v. Int'l Business Mach. Corp.*, 812 F.2d 525, 530 (9th Cir. 1987); *Sid & Marty Krofft*, 562 F.2d at 1167-69; *Herbert Rosenthal Jewelry Corp. v. Kalpakian*, 446 F.2d 738, 742 (9th Cir. 1971); *see also* M. Nimmer, 3 THE LAW OF COPYRIGHT § 13.03[B][3] (1990).

In *Aliotti v. R. Dakin & Co.*, 831 F.2d 898 (9th Cir. 1987), the Ninth Circuit incorporated the line of cases involving the merger and *scenes a faire* doctrines into the "analytical framework of the intrinsic test [the substantial similarity of expression test]." *Id.* at 901. Accordingly, such copyright doctrines, addressing the protectibility of elements of expression, are appropriately addressed in connection with

the second half of the *Krofft* bifurcated test of substantial similarity of ideas and expressions.

Although the court did invite motions addressing the issue of "scope of protection" of Apple's copyrights and the merger doctrine has been applied in other circuits to preclude copyrightability of a particular work, the court must follow the law of the Ninth Circuit. Since the court did not invite motions regarding the issue of substantial similarity, a resolution whether the works in suit are not substantially similar because of the merger of idea and expression in Apple's visual displays is premature at this time. Unfortunately, a substantial portion of HP and Microsoft's moving papers are irrelevant to the disposition of the current motions.

VI. *DISCOVERY SCHEDULE.*

Counsel are directed to contact the deputy clerk to schedule a status conference not less than 45 days from the date of this order. The court hereby imposes a full disclosure obligation on the parties. In advance of the status conference, therefore, the parties should meet and confer and, with respect to each claim and defense which the party asserts, disclose the following: (1) the location of all documents and other tangible evidence which the party has reason to believe pertain to each claim or defense without regard to the party's access to or control over the location; (2) the identity of each person believed to have knowledge of each claim or defense without regard to whether the person is aligned with the party and a brief narrative statement describing the party's belief as to the person's knowledge; and (3) an outline of the law applicable to each claim or defense. Based upon this exchange, the parties shall prepare a plan of discovery which shall be contained in a ***single*** joint status conference statement which must be filed not less than five days in advance of the status conference.

IT IS SO ORDERED.

APPLE COMPUTER, INC., Plaintiff,
v.
MICROSOFT CORPORATION and
HEWLETT-PACKARD COMPANY, Defendants.

No. C-88-20149-VRW

United States District Court,
N.D. California

June 15, 1991

ORDER DENYING MOTION FOR RECONSIDERATION, PARTIALLY GRANTING MOTION TO SUPPLEMENT, AND DENYING MOTION TO AMEND

WALKER, District Judge:

Counsel for the parties appeared before the court on June 13, 1991, to discuss: (1) Hewlett-Packard's ("HP") motion for reconsideration of the court's March 6, 1991 order granting Apple's motion for partial summary judgment on HP's affirmative defense of fraud on the Copyright Office; and (2) Apple's motion for leave to file a supplemental and amended complaint.

I. *HP'S MOTION FOR RECONSIDERATION.*

HP's motion for reconsideration asserts that HP has not been permitted to conduct discovery with respect to its fraud defense because prior to this court's February 8, 1990 order, Judge Schwarzer, during an unrecorded telephone conference on January 19, 1990, limited discovery to issues relating to the remaining items on Apple's list. Therefore, contends HP, this court's March 6, 1991 order granting partial summary judgment to Apple on HP's fraud defense was premature. At the June 13, 1991 hearing, this court denied HP's motion for limited reconsideration.

A brief review of the relevant facts will clarify the court's reasons. This court's February 8, 1990 status conference order provided:

> The next phase of this litigation will be limited to: (a) determination of the validity and scope of protection of Apple's claimed copyrights in the works in suit, including but not limited to, the issues of protectability and originality, * * * discovery on all other issues, including infringement, contributory infringement and defendants' counterclaims is stayed pending further order of this Court.

February 8, 1990 Status Conference Order at 2. Apple filed and served its motion for partial summary judgment on HP's affirmative defense of fraud on the Copyright Office on April 16, 1990. HP never filed an affidavit pursuant to Fed. R. Civ. P. 56(f) asserting the need for additional discovery. It was not until HP's January 7, 1991 letter to the court that HP first asserted that further discovery was necessary. *See* Stark Declaration filed May 17, 1991, Exh. 14. Furthermore, the first time that HP informed the court of the particular facts which would be uncovered by additional, limited discovery, their source and relevance, was in its reply to Apple's opposition to HP's motion for reconsideration. HP's Reply filed June 7, 1991, at 9.

Thus, HP was given the opportunity to conduct discovery on the fraud defense notwithstanding its apparent misunderstanding that the February 8, 1990 order limited discovery to the validity of Apple's copyrights with respect to the remaining items on Apple's list, not the validity of each copyright as a whole. In fact, HP did conduct discovery on its allegations of inequitable conduct with respect to the remaining items on Apple's list. Moreover, HP had two months of unrestricted discovery from the time this complaint was filed on March 17, 1988 through May 20, 1988 when Judge Aguilar ordered bifurcation of the licensing and infringement issues. *See* May 20, 1988 Order.

District courts have broad discretion in handling discovery matters. *See Foster v. Arcata Associates, Inc.*, 772 F.2d 1453, 1467 (9th Cir. 1985). Under the circumstances,

where a party unreasonably misconstrues the plain meaning of a discovery order, fails to avail itself of several months in which to conduct full discovery with respect to an issue, and fails to file a Rule 56(f) affidavit or the equivalent thereof, a district court may properly proceed to rule on motions for summary judgment. *See Bryant v. Ford Motor Co.*, 886 F.2d 1526 (9th Cir. 1989) (where plaintiff failed to file Rule 56(f) affidavit, district court's entry of summary judgment against plaintiff five months after complaint filed was not an abuse of discretion); *Brae Transp., Inc. v. Coopers & Lybrand*, 790 F.2d 1439 (9th Cir. 1986) (references in memoranda and declarations concerning need for discovery do not qualify as motions under Rule 56(f); because plaintiff failed to pursue discovery diligently before summary judgment motions were filed, it could not complain that the court should have allowed further discovery before ruling); *Foster*, 772 F.2d 1453, 1467 (9th Cir. 1985) (ruling on summary judgment before discovery completed was not an abuse of discretion because plaintiff "failed to follow the proper procedures under the Federal Rules of Civil procedure for obtaining a continuance or other appropriate discovery order when opposing a motion for summary judgment"); *THI-Hawaii Inc. v. First Commerce Fin. Corp.*, 627 F.2d 991, 993-34 (9th Cir. 1980) (affirming district court's grant of summary judgment two months after action filed and prior to any discovery because plaintiff failed to move for continuance under Rule 56(f)).

Although HP cites *Program Eng'g, Inc. v. Triangle Publications, Inc.*, 634 F.2d 1188 (9th Cir. 1980), for the proposition that the technical requirement of a Rule 56(f) affidavit is not necessary to postpone determination of a summary judgment motion where additional discovery is needed, the *Program Eng'g* court concluded that in light of the appellant's failure to point to any evidence creating an inference of conspiracy, failure to state what depositions it needed, other specific evidence it hoped to discover, and the relevance of such evidence to its claims, the appellant was not entitled to additional discovery before the lower court ruled on the summary judgment motion. *Id.*, 634 F.2d at

1194. Thus, HP's complete failure to provide the court with the equivalent of a Rule 56(f) affidavit and any evidence creating an inference of specific intent to mislead or defraud the Copyright Office constitutes a waiver of any claim to additional discovery.

II. *APPLE'S MOTION FOR LEAVE TO FILE A SUPPLEMENTAL AND AMENDED COMPLAINT.*

Pursuant to Fed. R. Civ. P. 15(d), Apple moves to file a supplemental complaint to update the versions of the products referred to in the original complaint: Windows 3.0, NewWave 3.0, Macintosh Finder 5.4, and Macintosh II ROM. Apple's original complaint, read liberally, appears to embrace updated versions of Windows and, thus, it appears that defendants should probably have been on notice that subsequent versions of Windows and NewWave are reached by Apple's litigation claims.

The complaint did not, however, allege that updated versions of the Macintosh Finder 5.4 and Macintosh II ROM were infringed. Furthermore, these programs were published on January 12, 1987, and March 15, 1987, respectively, well before Apple filed its complaint on March 17, 1988. Although Apple contends that it did not include these two programs in its original complaint because copyright registration certificates had not been obtained at that time, and registration is a prerequisite to filing a copyright infringement action pursuant to 17 U.S.C. § 411(a), HP notes that Apple could have availed itself of the procedures for expedited issuance of registration certificates, pursuant to 50 Fed. Reg. 46,206 (Nov. 6, 1985). HP also argues that supplementation of the complaint with these two derivative programs would entail substantial discovery to determine the scope of the copyrights on the derivative works.

Because the court cannot discern any reason for Apple's failure to include the Macintosh Finder 5.4 and Macintosh II ROM earlier in this litigation and it appears that the inclusion of these two programs at this late date would cause delay in these proceedings and substantial prejudice to the defendants, the court **DENIES** Apple's motion to file a

supplemental complaint including the Macintosh Finder 5.4 and Macintosh II ROM programs.

Finally, Apple seeks to add claims for breach of contract, rescission, and unfair competition against Microsoft in Count III of its proposed amended supplemental complaint. *See* Apple's Notice of Motion and Motion for Permission to Serve its Supplemental Complaint filed May 21, 1991, Tab B. The essence of proposed Count III is that Microsoft falsely represented that the 1985 Agreement would not permit Microsoft to create future versions of Windows to appear more similar to the Macintosh graphical user interface than Windows 1.0. *Id.* at 10 ¶25. In light of Judge Schwarzer's prior adjudication that during negotiations of the 1985 Agreement, Microsoft's counsel rejected Apple's proposed license limiting future Microsoft application programs from having an appearance, look and feel more like the Macintosh than that which already existed in Windows at the time of the 1985 Agreement (*Apple Computer, Inc. v. Microsoft Corp.*, 709 F. Supp. 925, 928 (N.D. Cal. 1989)), it appears that Apple's amendment to include claims for breach of contract, rescission and unfair competition would be futile.

III. *CONCLUSIONS.*

For the reasons stated above, the court concludes that:

1. HP's motion for limited reconsideration of the March 6, 1991 order is **DENIED**.

2. Apple's motion to file a supplemental complaint is **GRANTED** with respect to the addition of Windows 3.0 and NewWave 3.0, but **DENIED** with respect to Macintosh Finder 5.4 and Macintosh II ROM. However, the evidentiary issues concerning the use of the Macintosh Finder 5.4 as a replacement for the Macintosh Finder as evidence at trial are left open.

3. Apple's motion to file an amended complaint is **DENIED** in its entirety.

4. Apple shall file and serve a supplemental complaint in compliance with this order no later than June 28, 1991.

5. Apple shall file and serve a new list of allegedly infringing similarities between its copyrighted works in suit

and windows 3.0 and NewWave 3.0 no later than July 5, 1991.

4. In order to expedite the resolution of this case, the parties shall be permitted to conduct full discovery, and all prior orders staying discovery are vacated. At the presently scheduled July 8, 1991 hearing, counsel shall be prepared to discuss an appropriate cut-off date for *all* remaining discovery; the court urges counsel to establish a workable schedule but one that will conclude discovery, including that of opinion witnesses, as soon as practicable.

SO ORDERED.

APPLE COMPUTER, INC., Plaintiff,
v.
MICROSOFT CORPORATION and
HEWLETT-PACKARD COMPANY, Defendants.

No. C-88-20149-VRW

United States District Court,
N.D. California

July 25, 1991

ORDER ON DEFENDANTS' REQUEST FOR CLARIFICATION, APPLE'S MOTION FOR SUMMARY JUDGMENT ON COUNTERCLAIMS, & MICROSOFT'S MOTION TO DISMISS CERTAIN AFFIRMATIVE DEFENSES

WALKER, District Judge:

Counsel for the parties appeared before the court on July 8, 1991, to discuss: (1) defendants' request for clarification of the March 6, 1991 and May 24, 1991 orders; (2) Apple's motion for summary judgment on Microsoft's first and sixth counterclaims[1] (breach of the 1985 Agreement's covenant not to sue, and declaratory judgment regarding the scope and interpretation of the 1985 Agreement, respectively) and on HP's first and second counterclaims (declaration of noninfringement and copyright invalidity and unenforceability, and violation of § 2 of the Sherman Act, respectively); (3) Microsoft's motion to dismiss Apple's sixth, seventh, and eighth affirmative defenses to

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[1] In an attempt to narrow the issues in this case, Microsoft voluntarily dismissed its second, third, fourth, and fifth counterclaims pursuant to Fed. R. Civ. P. 41(a)(1)(ii). Similarly, HP dismissed its third and fourth counterclaims, and Apple dismissed its unfair competition claim. See Stipulation and Order filed July 9, 1991.

Microsoft's first counterclaim; and (4) further scheduling of discovery deadlines and filing of motions. The court shall address these matters seriatim.

I. *DEFENDANT'S REQUEST FOR CLARIFICATION.*

Defendants ask the court to clarify its March 6, 1991 and May 24, 1991 orders. In particular, defendants seek clarification whether the court's dismissal of HP's affirmative defense challenging the validity of Apple's copyrights on lack of originality grounds also dismisses any *scope of protection* defenses based on lack of originality. Defendants ask the court for an explicit ruling that all scope of protection issues remain for future determination: functionality, merger, scenes a faire, unprotectible ideas, indispensable or limited means of expression, and unoriginal expression.[2]

The essence of defendants' argument is that component elements of a copyrighted work which are unoriginal, i.e., borrowed from a previously existing work, are not within the scope of copyright protection and such unoriginal elements must be eliminated prior to the determination of whether the allegedly infringing and infringed works are substantially similar. Defendants contend that Apple should not be permitted to proceed with an infringement claim based partially on visual displays which have been borrowed from other software programs because such elements are unoriginal and unprotectible. In support, defendants quote language from *Feist Publications, Inc. v. Rural Tel. Service Co.*, 111 S.Ct. 1282, 1289 (1991) and *Harper & Row Publishers, Inc. v. Nation Enterprises*, 471 U.S. 539, 547-48 (1985) stating that copyright protection extends only to the components of the work which are original to the author

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[2] The reason the May 24, 1991 order referred to unprotectible expression under only the functionality, merger, and scenes a faire doctrines is that "unprotectible ideas" are encompassed within the merger of idea and expression theory and "indispensable or limited means of expression" is simply another term for the scenes a faire doctrine (see *Data East U.S.A., Inc. v. Epyx, Inc.*, 862 F.2d 204, 208 (9th Cir. 1988)).

and copying of unoriginal constituent elements does not constitute infringement. However, defendants have not cited a single Supreme Court or Ninth Circuit case in which the lack of originality of an element of a copyrighted work rendered that element unprotectible and excludable from the substantial similarity analysis.

While the term "originality" is subject to semantic variations, in the context of traditional copyright law, originality is a doctrine which relates to the copyrightable nature of a work as a whole rather than to whether copyright protection should be afforded to dissected elements of a work. In both *Feist* and *Harper & Row*, the Supreme Court refused to afford copyright protection to facts—scientific, historical, biographical and newsworthy, because they are not "original." In *Feist*, the facts were names, telephone numbers, and towns of subscribers compiled in a telephone directory. The facts in *Harper & Row* were quotations borrowed under the fair use doctrine and historical facts. The component elements of Apple's works which defendants contend are not original do not appear to be unprotectible and unoriginal facts of the type described in *Feist* and *Harper & Row*. An additional test of originality for constituent elements of a copyrighted work, as proposed by defendants, would, in effect, preclude copyright protection for all pictorial works, which, if dissected, would be composed of a limited number of geometric shapes. The existing doctrines limiting the scope of protection prior to the intrinsic test of substantial similarity, i.e., functionality, merger, and scenes a faire, are sufficient means of sifting out unprotectible elements. Accordingly, the originality of each of the remaining features in Apple's works in suit is not relevant to the scope of protection inquiry.

II. *APPLE'S MOTION FOR SUMMARY JUDGMENT.*

A. *Microsoft's First Counterclaim.*

Microsoft's first counterclaim alleges that Apple's filing of this lawsuit constituted a breach of the covenant

not to sue in the 1985 Agreement.[3] Apple seeks summary judgment on this claim because it is predicated on the assertion that the 1985 Agreement extends to the visual displays generated by Windows 2.03 and that issue has been adjudicated against Microsoft. Furthermore, Microsoft's counterclaims essentially assert that Apple's initiation of this action constitutes malicious prosecution and since Microsoft cannot establish that it prevailed in a prior proceeding, any claims which are essentially malicious prosecution causes of action must be dismissed.

Microsoft responds, first, that the visual displays in Windows 2.03 do not infringe Apple's copyrights because they are either licensed or unprotectible expression. Hence, even if all the visual displays in Windows 2.03 are unlicensed, Microsoft's counterclaim for breach of the covenant not to sue remains viable. Second, the first counterclaim is not equivalent to a malicious prosecution claim, but rather asserts breach of the 1985 Agreement's covenant not to sue. Since Apple agreed not sue Microsoft for copyright infringement and it has been judicially determined that the majority of allegedly infringing visual displays were licensed, Microsoft argues that Apple, by filing this lawsuit, has denied Microsoft the benefit of its bargain.

The 1985 Agreement's covenant not to sue only precluded Apple from asserting any "claim or right [Apple] may have as to Microsoft Windows Version 1.0." The plain meaning of this language is that Apple waived its right to sue Microsoft to the extent that Apple claimed any proprietary interest in Windows 1.0. The language of the release refers only to Windows Version 1.0 and contrasts with the provision which grants Microsoft an exclusive, royalty-free license to use the visual displays in Windows Version 1.0, Multiplan, Chart, File, Excel, and Word. Thus, Apple agreed not to sue Microsoft only with respect to any

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[3] The relevant provision reads: "*Release*. Apple hereby waives any other copyright, patent, trade secret or other claim or right it may have as to Microsoft Windows Version 1.0." See Sewell Decl., filed April 16, 1990, Exh. 8, at 2.

rights Apple may assert in Windows Version 1.0. Apple did not expressly waive any right to sue based on a claim to proprietary material in any other Microsoft programs.[4] Since Apple's lawsuit is based on Windows 2.03 and the claims did not merely involve proprietary interests in Windows 1.0, Apple did not breach the covenant not to sue on any claim to Windows Version 1.0. Accordingly, Apple's motion for summary judgment on Microsoft's first counterclaim is **GRANTED**. In light of this determination, Apple's sixth, seventh, and eighth affirmative defenses to Microsoft's first counterclaim are now moot.

B. *Microsoft's Sixth Counterclaim.*

Microsoft contends that its sixth counterclaim, for declaratory judgment to determine the scope and interpretation of the 1985 Agreement, has already been substantially resolved in Microsoft' favor because 95% of the allegedly infringing similarities were found licensed under the 1985 Agreement.

In light of the prior rulings that a majority of the alleged similarities in Windows 2.03 were licensed pursuant to the 1985 Agreement, Apple's motion for summary judgment to dismiss this counterclaim is moot. Apple's motion to dismiss Microsoft's sixth counterclaim is, therefore, **DENIED**.

C. *HP's Antitrust Counterclaim.*

HP's antitrust counterclaim alleges that Apple has monopolized and attempted to monopolize the United States market for personal computers utilizing a graphic user interface operating environment in violation of § 2 of the Sherman Act, 15 U.S.C. § 2. The factual allegations are that Apple: (1) filed this sham lawsuit in bad faith; (2) perpetrated a fraud on the Copyright Office; (3) attached misleading copies of manipulated NewWave screen displays to the complaint; and (4) generated negative publicity about HP's NewWave program with the intent to stall NewWave's

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[4] Even if the 1985 Agreement is construed to be a combined license and settlement agreement, the language of the agreement does not support an implied covenant not to sue on any grounds.

market entry, dissuade software developers from creating NewWave application programs and deter potential purchasers of NewWave systems. See HP's Answer and Counterclaims at 13-18.

Apple's motion for summary judgment relies on the constitutionally protected right to access to judicial process expressed in the *Noerr-Pennington*[5] doctrine. Apple argues that the initiation of this action was not "sham litigation" giving rise to a violation of § 2 of the Sherman Act and that Apple's press releases concerning this lawsuit contained true and fair reports of the litigation and hence were privileged conduct. Apple also maintains that HP has failed to provide any credible evidence that Apple's alleged misconduct had any effect on competition.

The *Noerr-Pennington* doctrine precludes antitrust liability for genuine attempts to influence the legislative or executive branches, whether or not there was an anticompetitive motive behind such efforts. *Noerr*, 365 U.S. at 138-40; *Pennington*, 381 U.S. at 670; *Omni Resource Dev. Corp. v. Conoco, Inc.*, 739 F.2d 1412, 1413 (9th Cir. 1984). The doctrine has been extended to immunize a competitor's attempts to influence judicial and administrative bodies from antitrust challenge. *California Motor Transport Co. v. Trucking Unlimited*, 404 U.S. 508, 510-11 (1972). As set forth in *Noerr*, antitrust liability may exist where an attempt to influence governmental process is "a mere sham to cover what is actually *nothing more* than an attempt to interfere directly with the business relationships of a competitor and the application of the Sherman Act would be justified." *Noerr*, 365 U.S. at 144 (emphasis added). The Ninth Circuit in *Omni* construed this language to define sham litigation as that undertaken *solely* to interfere with free competition and without the legitimate expectation that such efforts will in fact induce lawful government action. *Omni*, 739 F.2d at 1413.

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[5] *Eastern R. Presidents Conference v. Noerr Motor Freight, Inc.*, 365 U.S. 127, 81 S. Ct. 523 (1961); *United Mine Workers v. Pennington*, 381 U.S. 657 (1965).

In the Ninth Circuit, the "sham litigation" exception to the *Noerr-Pennington* doctrine may be invoked when there is only a single sham suit so long as the requisite sham intent can be proven. *Clipper Exxpress v. Rocky Mountain Motor Tariff Bureau, Inc.*, 690 F.2d 1240, 1254 (9th Cir. 1982); *Energy Conservation v. Heliodyne, Inc.*, 698 F.2d 386, 388-89 (9th Cir. 1983) (reversing district court's dismissal of claim that competitor's filing a lawsuit to generate adverse publicity with intent to monopolize the relevant market in violation of § 2 of the Sherman Act because dismissal may have been based on lack of repetitive baseless lawsuits). In *Energy Conservation v. Heliodyne*, the court noted that whether an action is a genuine attempt to influence governmental action or is a mere sham is a question of fact. *Id.* at 389.

Thus, in order to prevail on a § 2 of the Sherman Act claim, a plaintiff must establish: (1) there was at least one attempt to influence governmental process; (2) the defendant did not genuinely seek to obtain relief from the government, i.e., the suit was baseless; and (3) the defendant intended to interfere with free competition by seeking access to the government.

HP argues that the following evidence, when viewed in the light most favorable to HP, creates a genuine issue of material fact regarding Apple's anticompetitive intent in filing this action: (1) Apple refused to discuss its concerns regarding NewWave with HP, while HP cooperated by giving two pre-release presentations of NewWave; (2) Apple manipulated the NewWave screen displays to create a misleading appearance of substantial similarity between NewWave and Apple's works in suit and then attached copies of those screen displays to the complaint; (3) Apple's timing of the filing of this suit and its press releases occurred before NewWave's release for sale to the public, generating adverse publicity for NewWave; and (4) the baseless nature of Apple's claims.

HP's evidence is based on the most conclusory of affidavits. Furthermore, even viewing the evidence in the light most favorable to HP, the court fails to discern an

inference of any anticompetitive intent harbored by Apple. First, Apple's failure to respond to HP's requests for clarification of Apple's concerns about NewWave is simply prudent behavior. One who believes that a competitor intends to release an infringing product is under no duty to explain why the product is believed to infringe. Second, Apple's alleged deliberate manipulation to make the NewWave screen display resemble the Macintosh displays is merely a result of the adversarial legal system. In creating such a NewWave screen display, Apple apparently used nothing extraneous to the NewWave program. Third, the press release and filing of the action which coincided with the printing deadlines of many industry publications did not preclude HP from disseminating its own press releases in time for the next issue of such publications. Finally, the conclusory allegations that Apple's claims were baseless border on the frivolous in light of the unsettled state of the law governing the scope of copyright protection for graphic user interfaces.

Even if there were a factual question regarding Apple's intent in filing this lawsuit, so long as Apple also had a "legitimate expectation that such efforts will in fact induce lawful government action" (*Omni*, 739 F.2d at 1413), Apple's initiation of legal proceedings is immune from antitrust challenges. *Noerr-Pennington* immunity from antitrust liability can be lost only if the petitioning activity is undertaken solely to interfere with free competition and without legitimate expectation that such efforts will result in lawful government action. In filing this lawsuit, Apple clearly sought to protect its proprietary interests in its highly successful Macintosh graphic user interface and clarify the scope of its copyrights. This case presents novel and significant questions concerning the scope of copyright protection to be afforded to graphic user interface systems. The court has no question that this lawsuit was filed with the legitimate intent to obtain judicial relief. HP's litigation strategy in attempting to shift the focus of these proceedings from the novel and unsettled copyright issues presented to

a claimed abuse of the judicial process strikes the undersigned as astounding.

Despite the court's skepticism that HP's antitrust counterclaim could possibly be well grounded in fact and warranted by existing law or a reasonable extension thereof, the court will not at this time dismiss the antitrust counterclaim. As the essence of the counterclaim relates to whether this lawsuit is a sham or not, the court will simply withhold ruling until the litigation is completed or HP determines to withdraw its counterclaim. In the meantime, however, all proceedings on the antitrust counterclaim shall be **STAYED** to avoid the efforts of the parties and the court from being further distracted from the issues.

D. *HP's first counterclaim.*

In light of the court's prior adjudication that Apple did not perpetrate a fraud on the Copyright Office in obtaining its certificates of copyright registration for the works in suit and that Apple's works satisfied the originality requirement set forth in 17 U.S.C. § 102, Apple moves for partial summary judgment on HP's first counterclaim, to the extent it relies on allegations of fraud and lack of originality. HP's first counterclaim seeks declaratory judgment for: (1) copyright invalidity, (2) unenforceability, and (3) noninfringement.

HP responds that this court did not address the merits of the fraud defense and only ruled that HP failed to take discovery and point to evidence that would raise a triable issue of fact with respect to HP's affirmative defense. Furthermore, HP contends that its first counterclaim is broader than Apple contends, it is for invalidity and unenforceability of Apple's copyrights based on functionality, unlawful extension of scope, intentional misleading of this court by attaching copies of contrived NewWave screen displays to the complaint, violation of § 2 of the Sherman Act, copyright misuse and unclean hands.

The issues of fraud on the Copyright Office and originality of Apple's works in suit have been adjudicated on the merits in favor of Apple. March 6, 1991 Order at 19-24; June 15, 1991 Order at 1-4. [HP's failure to produce any

evidence creating a genuine issue of material fact in opposition to Apple's motion for summary judgment does not prevent the court's determination from being on the merits.] Therefore, HP's first counterclaim, to the extent it is based upon copyright invalidity, fraud on the Copyright Office, and lack of originality, should be dismissed.

Accordingly, the court **GRANTS** Apple's motion for partial summary adjudication that HP's first counterclaim be partially dismissed to the extent its assertion of copyright invalidity and unenforceability is based on any allegations that Apple's works are not original and that Apple perpetrated a fraud on the copyright office.[6]

III. *MICROSOFT'S MOTION TO DISMISS CERTAIN AFFIRMATIVE DEFENSES.*

In light of the dismissal of Microsoft's first counterclaim, it is unnecessary to address Microsoft's motion to dismiss Apple's sixth, seventh, and eighth affirmative defenses to Microsoft's first counterclaim.

IV. *APPLE'S LIST OF SIMILARITIES BETWEEN ITS WORKS AND WINDOWS 3.0 AND NEWWAVE 3.0.*

Defendants have complained to the court that Apple's Supplemental List of Similarities Regarding Windows 3.0 and NewWave 3.0 does not identify the similarities in sufficient detail. While recognizing the difficulty of describing the allegedly similar features of audiovisual works, which consist or a series of related images, a list similar to Apple's first List would be extremely helpful. The court must analyze the discrete visual displays for purposes of determining whether any of the displays in the allegedly infringing programs are licensed under the 1985 Agreement. Also, alleged similarities which are unprotectible must be excluded from the substantial similarity of expression comparison. Therefore, Apple is directed to file a new Supplemental List, describing in detail the alleged

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[6] Paragraphs 41(a)-(f) of HP's Answer and Counterclaim at 11-12 should be stricken from the complaint.

similarities between its works in suit and Windows 3.0 and NewWave 3.0.

V. *SCHEDULE FOR DISCOVERY AND FUTURE MOTIONS.*

Discovery on all matters except expert witnesses shall end on January 31, 1992.

No later than December 31, 1991, the parties shall designate *all* witnesses intended to testify at trial, including anticipated rebuttal witnesses and shall exchange brief narrative summaries of each witness' testimony and qualifications, if any. The designated experts' trial testimony shall be limited to those matters which are disclosed in the narrative summary. Expert witness depositions shall be completed on or before February 28, 1991.

Defendants' motion for reconsideration of the court's ruling that originality is not a means of excluding unprotectible expression in the intrinsic test of the substantial similarity analysis shall be filed by July 22, 1991. Apple's opposition brief shall be filed by July 29, 1992, and defendants' reply shall be filed by August 2, 1991.

SO ORDERED.

APPLE COMPUTER, INC., Plaintiff,
v.
MICROSOFT CORPORATION and
HEWLETT-PACKARD COMPANY, Defendants.

No. C-88-20149-VRW

United States District Court,
N.D. California

August 14, 1991

ORDER GRANTING MOTION FOR RECONSIDERATION

WALKER, District Judge:

I. DEFENDANTS' MOTION FOR RECONSIDERATION.

Defendants Microsoft and Hewlett-Packard ("HP") move the court to reconsider its dismissal of defendants' affirmative defense that the elements of Apple's copyrighted works in suit are not sufficiently original to warrant copyright protection. 759 F. Supp. 1444. In essence, defendants seek to use lack of originality of constituent elements as a means of eliminating those elements from the substantial similarity of expression analysis. Defendants rely heavily on dicta from *Harper & Row Publishers, Inc. v. Nation Enterprises*, 471 U.S. 539, 548, 105 S.Ct. 2218, 2224, 85 L.Ed.2d 588 (1985) and *Feist Publications v. Rural Telephone Service Co.*, ___ U.S. ___, 111 S.Ct. 1282, 113 L.Ed.2d 358 (1991) for the proposition that the copyright laws do not prohibit subsequent copying of unoriginal constituent elements from a prior author's work. Defendants also cite two Second Circuit cases in which lack of originality of component elements limited the scope of copyright protection. In *Silverman v. CBS, Inc.*, 870 F.2d 40 (2d Cir. 1989), the court concluded that the scope of

protection afforded by the copyrights in issue only extended to expression which was added to radio scripts which were in the public domain. In *Folio Impressions, Inc. v. Byer California*, 937 F.2d 759 (2d Cir. 1991), the Second Circuit concluded that the lack of originality of an element of a copyrighted work required exclusion of that element from the substantial similarity of expression analysis.

Upon reviewing the authorities cited by defendants, the court has concluded that in determining whether an individual element, completely divorced from its setting in a copyrighted work, is "unprotectible" (i.e., not entitled to copyright protection) there is apparently no principled means of distinguishing the traditional doctrines of merger, functionality, and scenes a faire from defendants' unoriginality of component elements theory. If a plaintiff directly copied the expressive elements of his work from preexisting works, he has no right to preclude others from using those same "unoriginal" elements. The defendant may not, of course, take any original expressive elements from plaintiff's work and use them in substantially similar manner simply because plaintiff used "unoriginal" elements and this remains true even if all but one of the expressive elements of plaintiff's work are unoriginal. The addition of even one original expressive element may so alter a work otherwise wholly comprised of unoriginal elements that copyright protection is appropriate. Nonetheless, to ensure defendants full opportunity to test their defenses, the court GRANTS defendants' motion for reconsideration to the extent that lack of original expression of a component element shall be relevant to the scope of protection and substantial similarity analyses.[1]

Defendants must show that the component features of Apple's works which are allegedly "unoriginal" have been directly copied from prior works. In other words, If Apple's expression of those component features is different from the

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[1] The court grants this reconsideration despite the reported observation of Microsoft's counsel that the motion does not matter "a lot." *Wall Street Journal*, section B, p. 2 col. 6, July 29, 1991.

expression of similar features in preexisting programs, then defendants have failed to establish that Apple's expression is "unoriginal."

II. VARIATIONS ON THE SUBSTANTIAL SIMILARITY OF EXPRESSION TEST.

Consideration of the present motion has reawakened the court's concern with the apparent state of the law (especially in the Ninth Circuit) suggesting that elements of an allegedly infringed work which are found to be "unprotectible" must be eliminated from consideration in the substantial of expression analysis. The problem results from the ofttimes metaphysical line drawing between idea and expression by which courts rationalize their decisions. *Shaw v. Lindheim*, 908 F.2d 531 (9th Cir. 1990); *Sid & Marty Krofft Television v. McDonald's Corp.*, 562 F.2d 1157 (9th Cir. 1977) and *Arnstein v. Porter*, 154 F.2d 464 (2d Cir. 1946), *cert. denied*, 330 U.S. 851, 67 S.Ct. 1096, 91 L.Ed. 1294 (1947), demonstrate the difficulties which this dichotomy poses for even the most thoughtful judges. Removing unprotectible elements prior to the substantial similarity of expression test would preclude copyright protection for factual compilations containing an innovative selection or arrangement of elements because each element would be eliminated and nothing would be left for purposes of determining substantial similarity.

For example, a defendant could argue that a plaintiff's musical composition is comprised of unprotectible musical notes which should be eliminated from the substantial similarity of expression analysis. Each individual note is unoriginal because not created by the composer. Alternatively, the defendant could argue that there is no other way to express the idea of a B-sharp note and, therefore, the "idea and expression" have merged. The problem with analytic dissection of copyrighted works is that carried to an extreme, it can preclude copyright protection for works which deserve protection in that they represent creative effort which the copyright laws seek to foster. Although HP contends that it is not urging the court to dissect features of Apple's works to such a trivial degree, the

parties offer no comprehensible standard to ascertain how close a dissection is required to implement the copyright laws.

Some dissection of elements and the application of merger, functionality, scenes a faire, and unoriginality theories are necessary to determine which elements can be used freely by the public in creating new works, so long as those works do not incorporate the same selection or arrangement as that of the plaintiff's work. Because there ought to be copyright protection for an innovative melding of elements from preexisting works, elements which have been deemed "unprotectible" should not be eliminated prior to the substantial similarity of expression analysis. Suppose defendant copied plaintiff's abstract painting composed entirely of geometric forms arranged in an original pattern. The alleged infringer could argue that each expressive element (i.e., the geometric forms) is unprotectible under the functionality, merger, scenes a faire, and unoriginality theories and, thus, all elements should be excluded prior to the substantial similarity of expression analysis. Then, there would be nothing left for purposes of determining substantial similarity of expression. In this example, elimination of "unprotectible" elements would result in a finding of no copyright infringement, which would be clearly inconsistent with the copyright law's purpose of providing incentives to authors of original works.

Accordingly, the court concludes that even if elements are found "unprotectible," they should not be eliminated from the substantial similarity of expression analysis. Instead, if it is determined that the defendant used the unprotectible elements in an arrangement which is not substantially similar to the plaintiff's work, then no copyright infringement can be found. If, on the other hand, the works are deemed substantially similar, then copyright infringement will be established even though the copyrighted work is composed of unprotectible elements. There is simply no other logical way of protecting an innovative arrangement or "look and feel" of certain works.

In the presentation of their respective positions, the court urges the parties to review and consider J. Wiley, "Copyright at the School of Patent," 58 *U.Chi.L.Rev.* 119 (1991). The author's effort to link copyright analysis to the underlying purpose of the law strikes the undersigned as an approach which might well afford a sound basis for decision of the substantial similarity issues presented here.

III. FURTHER PROCEEDINGS.

The court notes the correspondence of the parties concerning Apple's revised Supplemental List of Similarities Regarding Windows 3.0 and NewWave 3.0: letter to the court from David T. McDonald, dated August 1; letter to the court from Chris R. Ottenweller, dated August 2. The clerk is directed to file these letters as part of the record herein. In accordance with the apparent understanding of the parties, Apple is given until August 15, 1991 to file its supplemental list.

The court has received letters dated August 1 and 12 from Mr. Ottenweller, one of Apple's counsel, and letters dated August 6 and 8 from Mr. Marshall and Mr. McDonald, respectively, concerning a discovery dispute pertaining to interrogatories. In consideration of the complexity of this case, the court suspends the 35 interrogatory limit established by Local Rule 230-1(b). Each party shall be allowed a maximum of 350 interrogatories, including subparts. The court, however, admonishes the parties not to abuse this leave. In the court's view, interrogatories are best suited for purposes of identifying specific facts and sources of information.

The court notes with some apprehension that counsels' recent letters to the court suggest that the parties have been engaging in what appears to be rather unproductive skirmishing concerning discovery. Among the matters in contention are dates, times and length of certain depositions. If counsel are unable to proceed efficiently and professionally with discovery, the court will consider appointment of a discovery master pursuant to F.R.Civ.P. 53 to monitor discovery *at the parties' expense*. In order to help expedite matters, the court orders that no deposition of any

witness shall exceed 8 hours in duration without leave of the court. Parties are advised to report to the court obstructionist tactics of their adversaries during these proceedings.

Finally, the court appreciates the parties' attempts to illustrate the programs in suit in videotaped demonstrations. The resolution of the tapes is low, however, making it difficult to discern outlines, grey borders, and other details. In order to enhance the court's understanding of the works in suit and its ability to evaluate the issues, the court requests the parties to make available at their earliest possible convenience, the works in suit, the hardware, and instruction necessary to provide the court with a working familiarity with the programs and their operation. Counsel are directed to meet and confer to make appropriate arrangements.

SO ORDERED.

APPLE COMPUTER, INC., Plaintiff,
v.
MICROSOFT CORPORATION and
HEWLETT-PACKARD COMPANY, Defendants.

No. C-88-20149-VRW

United States District Court,
N.D. California

April 15, 1992

ORDER

WALKER, District Judge:

On April 14, 1992, the court ruled from the bench on certain of the parties' motions before the court. For the convenience of the parties, this is a summation of that ruling.

(1) *Microsoft's Motion for Partial Summary Judgment Regarding Microsoft Windows 2.03.* The following items on the Apple List are not protectible:

(a) because of merger of idea with expression: A1; A8; B1; B2; D2; D3; G4; G5;

(b) as scenes a faire, or expression flowing naturally from the idea: A1; A8; B1; B2; D1; D2; D3; G4; 65; G6;

(c) due to the limited number of ways to express the idea: A1; D1; G6.

(2) *Microsoft's Motion for Partial Summary Judgment Dismissing Apple's Claim Against Windows 3.0.* These 26 items in Windows 3.0 are deemed to be covered by the license: A2; A4; A5; A9; E1; F3; F15; G7; J1; J6; N3; O4; P4; P5; P22; P33; P37; P41; P52; P56; P60; R1; R2; R3; T5; W3.

(3) *Hewlett-Packard's Motion for Partial Summary Judgment on Lack of Originality as to Certain of the Items on Apple's List.* The evidence is uncontroverted that the

following items in the Apple list appeared in prior works that were known to Apple employees: G1; 62; 610; G11; 612; 613; 615; 616; 619; 620; 625; 626; 630; 631; 633; H1; H4; H5; H6; I2; I7; I8; J8; J10; J11.

The following items have not been shown to be unoriginal: G14; G24; H2; J9.

(4) *Hewlett-Packard's Motion for Summary Judgment that Items on Apple's List are Excluded from Copyright Protection Under 17 USC § 102(b).* Granted as to all but the following items listed in the motion: G11; H2.

(5) *Hewlett-Packard's Motion for Partial Summary Judgment on Limited Scope of Protection as to Certain of the Items on Apple's List.* The motion is granted as to the following items:

(a) due to the expression naturally flowing from the idea, or scenes a faire: G1; G10; G15; G16; G19; G20; G21; G24; G28; G29; H1; H4; H5; I2; I4; J10; J11;

(b) because of merger of idea and expression: G2; G12; G13; G14; G17; G18; G25; G26; G30; G31; G32; G33; H3; H6; I7; I9; I10; I11; J8; J9.

The motion is denied as to the following items: G11; H2; I1.

Defendants' motions show that copyright infringement cannot be predicated solely on the use of these unprotectible elements from the list of similarities. A look and feel which necessarily follows from the use of these elements likewise cannot be protected. If the Windows 1.0 "look and feel" when supplemented with unprotectible expression leads naturally to the look and feel of the works in question, there is no infringment. If, however, the as yet-unspecified "look and feel" of the Apple works is not the necessary result of the grafting of the unprotectible elements onto the licensed "look and feel" of Windows 1.0, infringement may be shown.

These issues will be taken up at the hearing on May 12, 1992.

IT IS SO ORDERED.

APPLE COMPUTER, INC., a California corporation,
Plaintiff,
v.
MICROSOFT CORPORATION, a Delaware corporation, and HEWLETT-PACKARD COMPANY, a California corporation, Defendants.

No. C-88-20149-VRW

United States District Court,
N.D. California

August 7, 1992

As Modified August 10, 1992

ORDER

WALKER, District Judge:

This order deals with a series of motions concerning ownership and protectibility against unauthorized copying of the visual displays associated with the Macintosh computer. Previous orders have described the earlier proceedings which led to the present motions. A brief summary of those proceedings will suffice here.

I.

Apple Computer, Inc. ("Apple") filed this copyright infringement action on March 17, 1988, against Microsoft Corporation ("Microsoft") and Hewlett-Packard Company ("HP"), claiming that Microsoft's Windows 2.03 computer software and HP's NewWave computer software infringed seven copyrights held by Apple. The copyrights at issue

protect the audiovisual works that Apple claims for the graphical user interface of its Macintosh computer.[1]

The litigation arose out of a dispute whether an earlier version of Microsoft's software, Windows 1.0, infringed Apple copyrights. Microsoft and Apple sought to put that dispute to rest by an agreement on November 22, 1985 ("1985 Agreement"). By that agreement, Apple granted to Microsoft a non-exclusive license of the audiovisual displays in Windows 1.0. As the court found on March 20, 1989, however, the 1985 Agreement is not a complete defense to this action, because it was limited to the visual displays in Windows 1.0 and did not cover displays in Windows 2.03 that were not in the prior work. *Apple Computer, Inc. v. Microsoft Corp.*, 709 F.Supp. 925, 930 (N.D.Cal.1989).

To allow the court to determine which allegedly infringing Windows 2.03 and NewWave visual displays were not contained in Windows 1.0, to facilitate comparison of the works in suit and to give the court and the parties a means to determine the scope of copyright protection, Apple was asked to submit a list of alleged similarities between its works and the works of defendants. Apple filed this list on April 7, 1989. The list contained 189 alleged similarities between the Apple audiovisual works and Windows 2.03 and 147 similarities between the Apple works and NewWave.

The court then determined that under the 1985 Agreement 179 of the similarities claimed to be in Windows 2.03 were licensed, *Apple Computer, Inc. v Microsoft Corp.*, 717 F.Supp. 1428 (N.D.Cal.1989), and that the agreement would cover all but 54 of the similarities alleged to be in NewWave, assuming of course that HP establishes that Microsoft in turn licensed these features to it, *Apple*

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[1] The Apple copyrights are: Lisa, reg. no. PA 336 104; Macintosh Finder, reg. no. PA 336 105; LisaDraw, reg. no. PA 336 103; MacDraw, reg. no. PA 336 102; MacPaint, reg. no. PA 336 107; LisaProject, reg. no. PA 336 106; MacProject, reg. no. 336 101.

Computer, Inc. v Microsoft Corp., 759 F.Supp. 1444 (N.D.Cal. 1991).[2]

After filing a supplemental complaint on June 28, 1991 that extended its claims to cover Windows 3.0 and NewWave 3.0, the updated versions of the Microsoft and HP works, Apple then filed two supplemental lists of similarities, incorporating the prior lists by reference. The second of the supplemental lists was filed on August 15, 1991 ("Second Supplemental List").

In the meantime, the parties engaged in lengthy and extensive discovery which concluded on January 31, 1992. There followed a deluge of summary judgment motions: two by Apple, seven from Microsoft and nine by HP. The court directed that these motions be taken up in three hearings on the basis of their legal and factual issues. The first was set to encompass all questions of originality, functionality, merger, indispensable expression and scénes á faire; these issues appeared in the Apple motion "as to Substantial Similarity and Certain Affirmative Defenses," the separate Microsoft motions to dismiss claims against Windows 2.03 and 3.0, the HP motions on lack of originality, limited scope of protection, and items excluded from copyright protection, and Microsoft's "Motion for Partial Summary Judgment Dismissing Apple's Claims Against Windows 2.03 and 3.0 Based on Certain Copyrights." At a second hearing, the court intended to hear argument on all questions of similarity contained in the motions, as well as the remaining issues in Apple's motions, and the Microsoft motion to dismiss the contributory infringement claim, and at a third hearing, the court planned to take up argument on the damages issues: Microsoft's motions concerning actual

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[2] Apple alleged that Microsoft licensed to HP, for use in NewWave, the visual displays in both Windows 2.03 and 3.0, allegations which both defendants admitted and which HP asserts are uncontested. Letter of J. A. Marshall, June 22, 1992. Apple apparently has recently had second thoughts about its allegations of a Microsoft/HP license, claiming now that HP's discovery responses on this subject have been "evasive," although it is not clear that Apple is withdrawing its allegations. Letter of C. R. Ottenweller, July 1, 1992.

damages and indirect infringer's profits, profits of foreign subsidiaries, and pre-judgment interest; and HP's motions concerning profits from sale of NewWave, actual damages, unjust enrichment, and joint and several liability.

But as often happens with the best laid plans, this scenario was upset when Apple refused to join the issues raised in defendants' motions. Apple contended that its own lists of similarities are not exact descriptions of any infringing features, but merely examples of the overall similarity of defendants' works. Sticking stubbornly to a "look and feel" or "gestalt" theory of this lawsuit, Apple was apparently of the belief that these passwords would automatically get its case around summary judgment motions and to a jury, regardless whether any of the visual displays that potentially comprise this "look and feel" are themselves protectible expression. Accordingly, Apple's response to the detailed arguments against protectibility that defendants made on an item-by-item basis was that, "we do not attempt here to chase every rabbit loosed by defendants' continuing focus on irrelevant detail." Apple Mem in Resp to Def'ts Motions at 9-10. Unaided by any effective opposition from Apple to defendants' motions, the court on April 14, 1992, after analytically dissecting the works in suit as best it could under the circumstances, determined that the 10 remaining items alleged against Windows 2.03 were not protectible under copyright law, and that 53 of the 54 alleged similarities in NewWave were subject to no or little copyright protection.[3] Apple promptly

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[3] To assist the court in its consideration of the issues at bar, on October 31, 1991, the parties gave the court and staff a tutorial in the use of their respective programs, and each party left with the court equipment on which the works in suit can be run. The use of these machines and programs at issue has been essential to the sorting out of the issues raised by these motions, which could not have been decided without the court's personal familiarity with the graphic displays and animation in suit and the hardware manipulation necessary to generate them.

moved for reconsideration and, for the first time, addressed the merits of defendants' motions.[4]

II.

As noted in earlier orders, Apple's Macintosh microcomputer turned out to be one of the major commercial triumphs of the 1980s.[5] Much of that success seemed to rest on the visual displays or images which the Macintosh generated on its computer screens. These proved highly intuitive, facilitated users' learning of how to operate the Macintosh and introduced millions to the wonderful capabilities for useful tasks which computers offer.

The combination of a computer monitor's visual displays and the user command functions on the keyboard or other input devices[6] is called the computer's user interface. On the Macintosh, the screen displays include icons or symbols to represent programs or information, pull down menus or lists of commands or information, use of windows to display information and the ability to move, re-size, open or close those windows to retrieve, put away or modify information, and a display of text by a proportionally spaced font in all menu items, title bars, icon names and text directories for a consistent and distinctive appearance. When a computer's visual displays incorporate significant graphic elements, as does the Macintosh, it is referred to as a graphical user interface (GUI or, in the argot of the trade, "gooey").

Apple came into existence in the 1970s. By late in that decade, Apple had enjoyed some success with its Apple II

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[4] The court also ruled that 26 of the alleged Windows 3.0 similarities were previously deemed covered by the 1985 Agreement when found in Windows 2.03, and hence are licensed. Reconsideration of this determination has not been requested.

[5] A microcomputer is one that utilizes a microprocessor as its central control and arithmetic element. Microprocessors are the product of the vast improvements in the technology for fabricating integrated circuits, which, beginning in the 1950s, made possible construction of huge numbers of transistors on a single chip, now usually made from silicon.

[6] These may include, among others, a mouse, joystick or pointer.

home computer and was seeking to develop new products. On at least two occasions in December 1979, Apple personnel (including its founder Steven Jobs) visited Xerox Corporation's Palo Alto Research Center ("PARC"). That facility had for several years done extensive work to make the operations of and images generated by computers more appealing and comprehensible to those lacking technical training or bent. An underlying assumption of Xerox's product development program was that the users of its products would not be particularly interested in computers themselves, but instead in what tasks or functions computers could perform. An overriding objective of Xerox's efforts was to make computer images and usage appealing and intuitive.

During the visits, Xerox's Larry Tesler demonstrated to the Apple people Xerox's Smalltalk software. Smalltalk had moveable rectangular overlapping windows, window tabs that represented files and information, a muted background to make the windows and tabs stand out, point and click manipulation of windows and tabs, and pop-up menus, among other graphical features. Many of the features which this order will discuss at length were developed at Xerox PARC and shown to the Apple personnel on their visits. Smalltalk also made extensive use of a hand operated device called a mouse which functioned as a cursor pointer. The mouse was not original to Xerox, having been developed at Stanford Research Institute, but Xerox—standing on the shoulders of those who preceded it as others would stand on Xerox's shoulders—extensively employed the device in its user interfaces.

A few months after the visits to PARC, Tesler went to work for Apple on its Lisa project, one of the new products Apple was developing. Additional Xerox personnel followed. In 1981, Xerox introduced its 8010 Star Information System, a workstation comprised of even higher performance machines than those on which Smalltalk ran. The Xerox Star made extensive use of icons to organize its functions.

The features of Xerox's graphical user interface, such as use of a mouse-driven cursor, overlapping windows, iconic

representation and so on had been made possible by development of bitmap graphics. A computer's processing unit generates, and a computer monitor displays, images by composing dots on the monitor screen called pixels which are illuminated, shaded or colored to achieve the desired effect. Bitmap graphics allow particular bits of the computer's memory function to manage each pixel, permitting programmers great flexibility in creating the visual displays actually generated. Programs written for computers having only limited amounts of such memory are forced to base their visual displays on vertically or horizontally defined lines and thus generally are confined to blinking cursors, letters, numbers and similarly limited characters. Such a visual interface is generally termed an alphanumeric or character-based interface and lacks the ability to generate the more complex shapes, forms, artistry and animation associated with a graphical user interface. A user wanting to start a word processing application, for example, in an alphanumeric or character-based interface might type the command "Exec WS" or to create a new file might type "Dup. F. Txt." A graphical user interface allows the user to see, point to and manipulate graphical images, symbols or words to instruct and interact with the computer to perform these same functions.

The ability to employ bitmap graphics and thus the graphical versatility of the Xerox PARC products were at least in part attributable to the configuration of the Xerox systems. The Xerox Smalltalk program demonstrated to the Apple groups in December 1979 ran on Xerox's proprietary computers which were linked on an Ethernet network. Similarly, in the somewhat later Xerox Star, individual monitors and keyboards were connected via an Ethernet network to file servers, printers and data base servers. By sharing resources in this manner, the Star workstations of that era were able to devote a significant amount of memory to screen displays and user commands. Stand alone personal computers, to at least the early 1980s, were incapable of mustering the operating memory resources necessary to generate visual displays of the complexity and animation of

the Xerox products. But, in 1979, Motorola introduced its 68000 microprocessor, a chip that took its title from the number of its components or transistors and could accommodate a vastly greater number of instructions than other chips used up to that time for personal computers. The Motorola 68000 chip could, in a stand alone microcomputer, support the high resolution display and highly interactive graphical interface necessary to emulate the ease of use of the Xerox products. Apple based its new products, the Lisa and Macintosh, around the Motorola 60000 chip.

Before Apple could get either of these products to market, however, IBM entered the personal computer field. Theretofore a producer of large mainframe computers, IBM sought to produce an economical product. Introduced in 1981, IBM's original PC used chips produced by an outside supplier, Intel, whose early microprocessors possessed less memory capability than the Motorola 68000 chips. IBM turned to another outside supplier, Microsoft, to produce system software for the PC. The MS-DOS[7] system software Microsoft devised for the IBM PC was confined by the limited capabilities of the hardware for which it was designed and thus its visual displays employed an alphanumeric or character-based user interface.

IBM nonetheless brought enormous financial resources and marketing capabilities to the personal computer field which fairly exploded in the first few years of the 1980s. In 1983, Apple introduced its bulky Lisa which, among other features, had a bitmap video display capable of a dot resolution of 364 lines of 720 dots each, detached keyboard and mouse driven cursor pointer. Apple priced Lisa at about $10,000, compared to the IBM PC then selling in a range beginning at under $2000. Despite her significantly more sophisticated graphics than the IBM PC, Lisa was a flop. The following year Apple introduced the Macintosh. This small machine had a high resolution bitmapped built-in monitor, screen displays based on the Motorola 68000

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[7] Microsoft trademark, an acronym for disk operating system.

microprocessor, detached keyboard and mouse. With a now classic advertising campaign introduced during a half-time break of the 1984 Super Bowl and a significantly more competitive price than the Lisa, the Macintosh got off to a good start despite the heavy competition from IBM.

Apple also took a quite different tack to software than had IBM. Apple not only owned the system software usable on the Macintosh but it required third party software developers to employ the Macintosh graphical interface, so that a user could readily go from one application to another keeping the same basic and familiar visual displays and input commands in all applications. By shortening the learning process for users of new applications, this requirement contributed greatly to overall user ease and satisfaction associated with the Macintosh. By contrast, the screen displays and user commands of an MS-DOS based application program designed to run on an IBM PC or an IBM compatible[8] may bear virtually no resemblance to another application program with which the user is already familiar, increasing learning difficulty and user frustration. While Apple's policy of maintaining uniform applications interfaces for the Macintosh has limited the number of Macintosh applications written, this policy has also helped Apple's marketing efforts to meld the images of Macintosh hardware and software into a single and "user friendly" whole.

In time, more sophisticated microprocessors were developed and increased the memory capacity of microcomputers. Microsoft developed and, in 1985, introduced its Windows 1.0 software. Windows operates on top of DOS and extends its visual or graphical capabilities.[9]

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[8] These are microcomputers that can accept software designed to run on an equivalent or similar IBM product.

[9] The relationship of operating system software and a computer's graphical capabilities is sometimes a little elusive. Because Apple tightly binds the interface of applications written for the Macintosh to its underlying system software and hardware, to a dedicated Mac user, these seem to blend together. See, e.g., 759 F. Supp. at 1447. Although

The later versions of Windows took advantage of the greater operating memory resources available in more recent non-Apple hardware. These could generate increasingly complex visual displays and animation and thus, with each new version, the visual displays of Windows seemed more and more to resemble those in the Macintosh. IBM and especially IBM compatible hardware has consistently been less expensive than comparable Macintosh hardware. There developed a huge base of IBM and IBM compatible hardware users interested in protecting their investments in such hardware and DOS based software.[10] Because each version of Windows seemed increasingly to offer that which Apple bad touted as the special advantage of the Macintosh, Windows proved a hugely formidable force in the software market. Apple responded with this lawsuit.

III.

The Ninth Circuit employs a two-part test to determine whether a work infringes the copyright in another work. First, the "ideas" of the works in suit are compared for substantial similarity, using an "extrinsic test" or "objective analysis of expression." *Sid & Marty Krofft Television v. McDonald's Corp.*, 562 F.2d 1157, 1164 (9th Cir. 1977); *Shaw v. Lindheim*, 919 F.2d 1353, 1357 (9th Cir. 1990). Analytic dissection, employing a list of criteria of comparison informed by expert testimony, is a part of this exercise,

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sometimes referred to as an operating system software, see id, Windows runs on and extends DOS system software by giving it a windowing capability. NewWave, sometimes referred to as an application program, see 759 F. Supp. at 1448, runs on DOS with Windows and enhances them by creating objects which process data and control computer functions. NewWave accepts and runs applications in the object-oriented environment it creates.

[10] The text should not be understood to suggest that the computer world is divided into IBM/MS-DOS and Macintosh spheres only. There are a number of other major graphical user interfaces employing at least some of the standardized features claimed by Apple. Microsoft videotape Exhibits A and B, scénes á faire.

which makes this well-suited for determination as a matter of law. *Krofft*, 562 F.2d at 1164.

If the ideas are substantially similar, then an "intrinsic test" or "subjective analysis of expression" is used. *Shaw*, 919 F.2d at 1357. In suits involving *literary* works, *Shaw* requires that the intrinsic test be performed by the trier of fact, and not by the court upon a motion for summary judgment. Id at 1359. It should be emphasized that *Shaw* confines its holding to suits involving literary works, or arguably the literary aspects of works, see *Brown Bag v. Symantec*, 960 F.2d 1465, 1476 (9th Cir. 1992), and does not extend to visual displays.

Moreover, the "intrinsic test" entails a comparison of the portions of a work that can be the subject of copyright protection. See *Pasillas v. McDonald's Corp.*, 927 F.2d 440, 443 (9th Cir. 1991). Because the "intrinsic test" is thus limited, a finding of similarity of ideas does not complete the "extrinsic test." See Melville B. Nimmer and David Nimmer, 3 *Nimmer on Copyright*, § 13.03[B] at 13.57 (Matthew Bender, 1992). If the similarity of the works in suit stems solely from unprotectible features, then the plaintiff's case is missing an essential element of infringement. *Feist Publications, Inc. v. Rural Telephone Service Co.*, ___ U.S. ___, 111 S. Ct. 1282, 113 L. Ed. 2d 358 (1991); *Data East USA, Inc. v. Epyx, Inc.*, 862 F.2d 204, 208 (9th Cir. 1988). Under such circumstances, summary judgment is plainly appropriate before even reaching the "intrinsic test." *See Frybarger v. IBM*, 812 F.2d 525, 530 (9th Cir. 1987).

The "non-literal components" of a computer program, including its user interface, are protectible if, "on the particular facts of each case, the component in question qualifies as an expression of an idea [not] an idea itself." *Johnson Controls v. Phoenix Control Systems*, 886 F.2d 1173 (9th Cir. 1989). In affirming a preliminary injunction against copyright infringement, the Second Circuit observed that the sequence of images on a computer screen "might contain so little in the way of particularized form of expression as to be only an abstract idea portrayed in a noncopyrightable form [citation omitted]." *Stern Electronics,*

Inc. v. Kaufman, 669 F.2d 852, 857 (2d Cir. 1982). To determine whether similarities result from unprotectible ideas, analytic dissection of similarities may be required. "If this demonstrates that all similarities in expression arise from use of common [i.e., nonprotectible] ideas, then no substantial similarity exists." *Data East*, 862 F.2d at 208. In performing this analysis, the Ninth Circuit has instructed district courts to focus on the claimed similarities between the works in suit because a focus on dissimilarities would "distract a reasonable observer from a comparison of the total concept and feel of the works."[11] Id.

Further, in order for the trier of fact to compare the expression in an "intrinsic test," there must be something to compare. If a work contains no protectible expression, then the intrinsic test is mooted. *See Aliotti v. R. Dakin & Co.*, 831 F.2d 898, 901 (9th Cir. 1987). Analytic dissection, "not for the purposes of comparing similarities and identifying infringement, but for the purposes of defining the scope of plaintiff's copyright," *Brown Bag*, 960 F.2d at 1475-76, is required under those circumstances.

Analytic dissection for this purpose must be guided by the doctrines that draw the somewhat hazy boundary between idea and expression. A work, of course, can be comprised of many basic ideas, which cannot themselves be protected. See *Frybarger*, 812 F.2d at 529-30 ; 17 U.S.C. § 102(b). If the idea and the author's particular way of expressing that idea cannot be separated, under the concept of merger only identical copying of the expression is barred.

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[11] The court does not believe that the *Data East* panel's reference to "total concept and feel" is an endorsement of Apple's expansive "look and feel" theory. Indeed, both "look and feel" and "total concept and feel" have been soundly criticized. See Nimmer, 3 *Nimmer on Copyright* §§ 13.03[A],[F]; Pamela Samuelson, *Why the Look and Feel of Software User Interfaces Should Not Be Protected by Copyright Law*, 32 Communications of the ACM 563 (May 1989). The caution of *Data East* against comparing dissimilarities could well have been explained, more succinctly and without reference to the controversial "total concept and feel," by observing simply that dissimilarities afford no evidence of copying.

See *Krofft*, 562 F.2d at 167-68. This has been said to occur, "[i]f, in describing how a work is expressed, the description differs little from a simple description of what the work is." Id at 1168 n.10.

Merger means there is practically only one way to express an idea. But if technical or conceptual constraints limit the available ways to express an idea, even though there is more than one avenue of expression available, copyright law will abhor only a virtually-identical copy of the original. *Telemarketing Resources v. Symantec Corp.*, 12 USPQ2D 1991, 1989 WL 200350 (N.D. Cal. 1989), aff'd in part as *Brown Bag Software v. Symantec Corp.*, 960 F.2d 1465 (9th Cir. 1992). Sometimes this is described as "indispensable expression," a term which is also used as a synonym for the scénes á faire doctrine. Scénes á faire originated in stock characters and features of dramatic works, *See v. Durang*, 711 F.2d 141 (9th Cir. 1983), and now encompasses stereotyped expression, standard or common features in a wide variety of works, including audiovisual works generated by computers. See *Frybarger*, 812 F.2d at 530.

The functionality of a feature may deprive it of protection under the copyright laws. This exclusion is codified at 17 U.S.C. § 102(b):

> In no case does copyright protection for an original work of authorship extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work.

Blank forms are one example of a feature that is unprotectible because functional. 37 C.F.R. § 202.1(c); see also *Baker v Selden*, 101 U.S. 99, 11 Otto 99, 25 L. Ed. 841 (1880).

Additionally, turning the tables on a copyright plaintiff, the lack of originality of a feature or a work will deprive it of copyright protection. *Apple Computer, Inc. v. Microsoft Corp.*, 779 F. Supp. 133, 135 (N.D. Cal. 1991); *Midway Mfg.*

Co. v. Bandai-America, Inc., 546 F. Supp. 125, 140 (D.N.J. 1982).

These doctrines inhere in the source of copyright, U.S. Const., Art. I, § 8, cl. 8. Hence, copyright protection may not serve as an invulnerable shield at the behest of any who invokes its powers. Copyright protection must serve a designated purpose; namely, "[t]o promote the Progress of Science and the useful Arts[.]" Id.

Copyright affords an incentive to authors, the guarantee that free-riders will not be able to appropriate the revenues needed to recoup the author's investment in creativity. But while copyright protection increases the expected revenues of authors by restricting competition, it also can have the effect of raising the costs of creation by making a useful building block of creativity the exclusive property of a prior author.[12] Courts have developed copyright's limiting doctrines as an implicit response to the problem posed by these revenue and cost effects.

Certain features of artistic works are so common, or so obvious, that they require virtually no creative effort to conjure and thus do not depend on the revenue effect of copyright protection. The concepts of ideas, scénes á faire, and lack of originality fall into this category of limiting doctrines. On the other hand, placing some features of artistic works in the exclusive domain of one author would so raise the costs of creation for others as to impede the progress of the arts. This accounts for the doctrines of merger, limited number of ways, and functionality. To apply these doctrines, courts must analytically dissect the works of an author seeking copyright protection to determine the metes and bounds of his property interest in the works. The features of works that are covered by these limiting doctrines are protected only from virtually identical copying, for this is the province of the ultimate free-rider, who makes a zero investment in creativity.

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[12] See generally William M. Landes and Richard A. Posner, *An Economic Analysis of Copyright Law*, 18 J Legal Stud 325 (1989).

The court has on an earlier occasion in this case expressed its belief that the various doctrines that limit copyright protection are often barely distinguishable from one another. 779 F. Supp. at 134. Nevertheless, in April the court made such a distinction in ruling on the protectibility of individual items.

IV.

Apple contends that to "understand" the distinctive appearance of the Macintosh interface, "one needs to consider not only the individual elements that make up the appearance of the interface but also the way those elements are arranged and interact with one another to create the consistent and distinctive Macintosh interface." Schneiderman 4/24/92 Suppl Decl ¶ 3. The claimed unifying idea of the Lisa and Macintosh works is "an interface suggestive of an office environment with a desktop background, implementing through animated graphical images and fanciful symbols what has been referred to as a 'desktop metaphor.'" Apple Support Mem, Motion for Part SJ re: Subst'l Sim at 8:9-13. Making the point literally, Apple's counsel has gone so far as to exhibit in the courtroom a chart purporting to show an alternative portrayal of this metaphor, a computer screen containing the image of a desk!

Apple's expert put such hyperbole aside and attempted to isolate the general concepts or ideas that make up the "desktop metaphor." Although the expert's descriptions are less than categorical, they principally include: multiple windows that serve as separate workspaces or mini-screens unto themselves; the ability to open and close these windows; icons that represent programs, files and documents; the use of a mouse to manipulate directly these visual displays; menu bars dedicated to an array of choices. Schneiderman 5/24/90 Dep at 243-44; Schneiderman 4/24/92 Suppl Decl; see also Apple Mem Recon, Exh B, listing fourteen "Macintosh Components;" Foley Decl ¶ 11. These concepts arguably were used in the Macintosh because—to some degree—they emulate the familiar environment of the

desktop and thus render the computer a somewhat less forbidding apparatus.

But Apple goes further than simply claiming that the Macintosh interface expresses these ideas. To the extent the individual features of the Macintosh interface are licensed or are unprotectible they are together, or in conjunction with the protectible features, claimed as a copyrightable arrangement—a "look and feel" which constitutes protectible expression apart from its individual elements. Apple's theory is necessitated here because the actual arrangement of displays on a computer monitor running any interactive program is largely the product of the user's efforts, negating any claim of the programmer to original authorship.[13] This arrangement or "look and feel" theory is further necessitated because use of graphic imagery of office objects in computer interfaces is indisputably unoriginal to Apple. See, e.g., Dep Exhs 222, 237, 279, 313. But, more importantly, use of such objects or an arrangement of them denotes the "desktop metaphor," not as an idea unifying the expressive elements of the Macintosh interface but simply as a collection of visual displays and user commands designed to render use of the computer, as Apple's expert concedes, more "utilitarian." Schneiderman 2/26/92 Dep at 558-59.

The elements of such an arrangement serve a purely functional purpose in the same way that the visual displays and user commands of the dashboard, steering wheel, gear shift, brakes, clutch and accelerator serve as the user interface of an automobile. *See Synercom Technology, Inc. v. University Computing Co.*, 462 F. Supp. 1003, 1013 (N.D. Tex. 1978). Purely functional items or an arrangement of them for functional purposes are wholly beyond the realm of copyright as are other common examples of user interfaces or arrangements of their individual elements—the dials, knobs and remote control devices of a television or VCR, or the buttons and clocks of an oven or stove. Of course, the

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[13] Contrast *Eales v. Environmental Lifestyles, Inc.*, 958 F.2d 876 (9th Cir. 1992) (subjects of copyright protection were architect's plans, "fixed" on paper).

elements of these everyday user interfaces are seldom conflated into metaphoric images, but that does not mean that the user interface of a computer is less functional.

Under the law of this Circuit, an article which has "*any* intrinsic utilitarian function" can be denied copyright protection "except to the extent that its artistic features can be identified separately and are capable of existing independently as a work of art." *Fabrica Inc. v. El Dorado Corp.*, 697 F.2d 890, 893 (9th Cir. 1983) (emphasis in original).[14] The very purpose of a computer user interface "lies in its ability to help people prepare and analyze their work quickly and flexibly." Comment, *Lotus Development Corp. v. Paperback Software International: Broad Copyright Protection for User Interfaces Ignores the Software Industry's Trend Toward Standardization*, 52 U Pitt L Rev 689, 705 n 65 (1991). Copyright protection can attach only to such a product's separate artistic features or can afford only such limited protection as appropriate when its features are the product of a compilation. See *Harper House, Inc. v. Thomas Nelson, Inc.*, 889 F.2d 197, 205 (9th Cir. 1989).

The similarity of such functional elements of a user interface or their arrangement in products of like kind does not suggest unlawful copying, but standardization across competing products for functional considerations. Standardization of the visual features in a computer's interface helps to achieve its purpose, a point which Apple learned early on when it insisted on interface uniformity for Macintosh applications and which has also been implicitly recognized by this court. *Ashton-Tate Corp. v. Ross*, 728 F. Supp. 597, 602 (N.D. Cal. 1989), aff'd 916 F.2d 516, 522 (9th Cir. 1990).

Some visual displays are or become so closely tied to the functional purpose of the article that they become standard. If "market factors play a significant factor in determining

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[14] For an example of separable artistic expression associated with another type of user interface, see *In re Yardley*, 493 F.2d 1389 (CCPA 1974) (copyright registration of a Spiro Agnew watch face does not preclude a design patent for the watch face, under 35 U.S.C. § 171).

the sequence and organization" of a computer program, then those patterns may well be termed ideas beyond the ownership of any one seller. *Plains Cotton Co-Op v. Goodpasture Computer Serv.*, 807 F.2d 1256, 1262 (5th Cir. 1987). No better evidence of "market factors" (i.e., expectations of users) accounting for the features of computer user interfaces can be found than the almost invariable incorporation of those features in most graphical user interfaces. Microsoft's videotape Exhibits A and B, scénes á faire[15] ("videotape A" and "videotape B"), establish that graphical user interfaces almost always incorporate the basic elements of the Macintosh interface; even some character-based interfaces possess come of these features.

Based on what is observable in Microsoft's videotapes A and B, the five basic features of graphical user interfaces are found in the following combinations:

SCÉNES Á FAIRE TABLE

Features
1. Overlapping windows.
2. Iconic representation.
3. Object opening/closing.
4. Menus.
5. Iconic manipulation.

Computer interface, release yrs.	1.	2.	3.	4.	5
Xerox Smalltalk, 1979	X	X		X	X
Perq/ICL, 1980-85	X				
Xerox Star, 1981	X	X	X	X	X
Symbolics Release 4.0 and 4.5, 1981-82	X			X	
Apollo Domain 3.0, 1981	X				
Lilith System, 1982	X			X	
*DRI Concurrent CP/M, 1983	X				
Tektronix Smalltalk, 1984	X	X		X	X

[15] Apple raises factual objections with respect to a few of the features described in the videotapes. Letter of C. R. Ottenweller, June 5, 1992. The table of features here presented is not inconsistent with Apple's contentions concerning the various works, and Apple's objections, while noted, are immaterial.

	1.	2.	3.	4.	5
*IBM Top View, 1984	X			X	
Apollo Domain 8.0, 1984	X	X			X
Metaphor, 1984-89	X	X	X	X	X
*Quarterback DESQview, 1985-90	X			X	
Xerox Viewpoint, 1985	X	X	X	X	X
Symbolics Genera, 1986	X			X	
Commodore-Amiga Workbench 1.3, 1987	X	X			X
Digital Equipment DECwindows, 1988-89	X	X		X	
IBM/MS OS/2 1.1, 1988	X	X		X	X
Apollo Domain 10.3.5, 1988-91	X	X			X
Sun Microsystems/OSF Looking Glass, 1988-90	X	X		X	X
Open Software Foundation Motif, 1989-91	X	X	X		X
NeXT 2.1, 1989-91	X	X	X	X	X
IBM/MS OS/2 1.2, 1989	X	X	X	X	X
X Consortium Tab Window Manager, 1990	X	X	X		
GeoWorks Ensemble, 1990	X	X	X	X	X
Atari GEM, 1990	X	X	X	X	X
X.Desktop, 1990	X	X	X		X
Sun Microsystems Sun View, 1990	X	X		X	X
Sun Microsystems Open Windows, 1990 (a/k/a "Open Look")	X	X		X	X
Commodore-Amiga Workbench, 2.0, 1991	X	X		X	X

* Denotes character-based interface.

To be sure, a few judges have said in relation to computer software that "the purpose or function of a utilitarian work would be the work's idea, and everything that is not necessary to the purpose or function would be part of the expression of the idea." See, e.g., *Whelan Associates v. Jaslow Dental Laboratory*, 797 F.2d 1222, 1236 (3d Cir. 1986); *Broderbund Software, Inc. v. Unison World*, 648 F. Supp. 1127 (N.D. Cal. 1986); *Digital Communications v. Softklone Distributing*, 659 F. Supp. 449, 462 (N.D. Ga. 1987). But this surely is too facile a distinction as it

obscures rather than illuminates the first part of the analysis commanded by the Ninth Circuit, comparing the similarities of ideas.

The *Whelan* court dealt with claims that the defendant unlawfully copied plaintiff's dental laboratory record keeping program to create a competing program and determined that "the idea is the efficient organization of a dental laboratory." 797 F.2d at 1240. Apple relies heavily on *Whelan*'s dichotomy to support its "desktop metaphor" line of attack and strenuously contends that it is consistent with Ninth Circuit authority. See Apple Reply Mem, Motion for Part SJ re: Subst'l Sim at 8-9.

As noted above, however, the Ninth Circuit has recognized that a single program may contain a number of nonprotectible ideas. See *Frybarger*, 812 F.2d 525. A single program need not limit its expression to one idea, a point that would seem particularly true in the case of software which controls a wide variety of computer functions. Furthermore, the parties' own understanding as shown by the negotiations leading to the 1985 Agreement demonstrates that Apple and Microsoft accepted specified visual displays as the protectible expression, not the entirety of the interface. 717 F. Supp. at 1431. Still further, the extensive criticism by courts and commentators of *Whelan* and kindred decisions has recognized that "*Whelan*'s general formulation that a program's overall purpose equates with the program's idea is descriptively inadequate," the product of "the opinion's somewhat outdated appreciation of computer science," and its heavy emphasis on "metaphysical distinctions" instead of "practical considerations." *Computer Assoc. Int'l, Inc. v. Altai, Inc.*, ___ F.2d ___ 92 Daily Journal DAR 10110, 10117 (2d Cir, June 26, 1992). Most importantly, the *Whelan* rule distends copyright protection, placing off-limits alternative and improved means of expression and thereby upsetting the uneasy balance which copyright attempts to maintain by preventing free riders from ripping off creative expression while not stifling others from improving or extending that expression. Id at 10120-21.

Copyright's purpose is to overcome the public goods externality resulting from the non-excludability of copier/free riders who do not pay the costs of creation. Peter S. Menell, *An Analysis of the Scope of Copyright Protection for Applications Programs*, 41 Stan. L. Rev. 1045, 1059 (1989). But overly inclusive copyright protection can produce its own negative effects by inhibiting the adoption of compatible standards (and reducing so-called "network externalities"). Such standards in a graphical user interface would enlarge the market for computers by making it easier to learn how to use them. *Id.* at 1067-70. Striking the balance between these considerations, especially in a new and rapidly changing medium such as computer screen displays, represents a most ambitious enterprise. Cf *Lotus Dev. Corp. v. Paperback Software Int'l*, 740 F. Supp. 37 (D. Mass. 1990).

While the Macintosh interface may be the fruit of considerable effort by its designers, its success is the result of a host of factors, including the decision to use the Motorola 68000 microprocessor, the tactical decision to require uniform application interfaces, and the Macintosh's notable advertising. And even were Apple able to isolate that part of its interface's success owing to its design efforts, lengthy and concerted effort alone "does not always result in inherently protectible expression." *Computer Assoc. Int'l*, ___ F.2d at ___ 92 Daily Journal DAR at 10121.

By virtue of having been the first commercially successful programmer to put these generalized features together, Apple had several years of market dominance in graphical user interfaces until Microsoft introduced Windows 3.0, the first DOS-based windowing program to begin to rival the graphical capability of the Macintosh. The Macintosh still to this day offers graphical features that translate into competitive advantages. See Walter S. Mossberg, *PC Shoppers May Find It's Wise to Develop a Taste for Apples*, Wall St Journal, Aug. 6, 1992, at B1. To accept Apple's "desktop metaphor"/"look and feel" arguments would allow it to sweep within its proprietary embrace not only Windows and NewWave but, at its option, also other

desktop graphical user interfaces which employ the standardized features of such interfaces, and to do this without subjecting Apple's claims of copyright to the scrutiny which courts have historically employed. Apple's copyrights would hold for programs in existence now or in the future—for decades. One need not profess to know for sure where should lie the line between expression and idea, between protection and competition to sense with confidence that this would afford too much protection and yield too little competition.

The importance of such competition, and thus improvements or extensions of past expressions, should not be minimized. The Ninth Circuit has long shown concern about the uneasy balance which copyright seeks to strike:

> What is basically at stake is the extent of the copyright owner's monopoly—from how large an area of activity did Congress intend to allow the copyright owner to exclude others?

Herbert Rosenthal Jewelry Corp. v. Kalpakian, 446 F.2d 738, 742 (9th Cir. 1971).

The court declines Apple's invitation to use the advent of the microcomputer and its interface to abandon traditional standards which govern copyrights and invent some new law based on highly indefinite constructs such as "look and feel."[16] As a result, if "desktop metaphor" is to have any meaning in the context of a traditional copyright analysis, it should serve merely as a label for that group of "ideas" embodied in the Macintosh interface devoted to utilitarian uses of that computer, or as a shorthand way of describing the purpose or object of the panoply of ideas of multiple windows, iconic representation and manipulation,

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[16] Without dispute, a copier may not make "immaterial variations" and thereby escape copyright liability, *Nichols v. Universal Pictures Corp.*, 45 F.2d 119, 120 (2d Cir. 1930) (L. Hand, J), and, to this limited extent, there is some legitimacy to a "look and feel" test, a point this court previously recognized. 779 F. Supp. at 135. But this test should be applied only after protectible expression has been identified, not before, as Apple would have this court do.

menus and object opening and closing functions to assist computer users in operation of their machines. "Desktop metaphor" does not describe the single unifying idea of the Macintosh interface, but is simply another name for the type of interface used on the Macintosh and is by no means exclusive to it.

V.

The Apple lists of claimed similarities and the submissions of its own expert make evident the following groupings of standardized features or "ideas": (1) use of windows to display multiple images on a computer screen and facilitate interaction with the information contained in the windows; (2) use of icons to represent familiar objects from the office environment and facilitate organization of information stored in the computer's memory; (3) manipulation of icons to convey instructions and to control operation of the computer; (4) use of menus to store information or functions of the computers in a place that is convenient to reach, but saves screen space for other images; and (5) opening and closing of objects as a means of retrieving, transferring or storing information. For the reasons which follow in detail, these are common to all the works in suit, and must be deemed "ideas" and thus placed beyond the lone province of Apple or any other programmer. Having decided that a graphical user interface may be composed of many ideas, the court turns to deciding what elements of the Macintosh interface constitute protectible expression.

Microsoft moved for partial summary judgment that copyright protection does not extend to any of the 10 individual items on the first list that have not previously been deemed to be covered by the 1985 Agreement (A1, A8, B1, B2, D1-3, G4-6).[17] The court granted the motion as to

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[17] These ten features were adjudicated under "Microsoft's Motion for Partial Summary Judgment Regarding Windows 2.03." Microsoft's companion motion "regarding Windows 3.0" reincorporates the same arguments and, although not made explicit in April, would work to apply this ruling to cover the features when they reappear in Windows 3.0.

each of the items on three different grounds merger (all but D1 and G6); scénes á faire (all); due to limited number of ways to express idea (A1, D1, G6). The court also ruled that 25 of the 54 items in the lists of similarities alleged against HP's NewWave products were not original to Apple, that 36 of the items were excluded from copyright protection under § 102(b), and that limited protection was afforded 17 items under scénes á faire and 20 items because of merger of idea and expression. Only item H2, the use of a trash can to represent the discard folder, was determined not to be covered under any of the separate motions.

Apple in its motion for reconsideration has finally addressed the individual items on the lists. The court recognizes that the artistic expression that is associated with each item is the actual ground for the protection claimed, this being a suit over visual displays. The law of the Ninth Circuit makes plain, however, that when any of the various doctrines that limit the scope of protectibility are in operation, the affected expression may provide a basis for a claim of infringement only if the alleged copy is virtually identical to the plaintiff's version. See *Frybarger*, 812 F.2d at 530 ; *Krofft*, 562 F.2d at 116; *Rachel v. Banana Republic, Inc.*, 831 F.2d 1503, 1507 (9th Cir. 1987).

A. *Overlapping Windows.*

The first and probably most notable idea associated with the Macintosh interface is the use of overlapping windows to display multiple images on a computer screen in order to facilitate organization of information and the user's interaction with it. Overlapping windows are central to Apple's claimed similarities and, as shown in the Scénes á faire Table, supra, invariably present in graphical user interfaces.

These ten features are also alleged to be in the HP works, and proof of a Microsoft-HP license would extend this ruling to those works as well. See the text accompanying note 2.

A1 The design and layout in Macintosh includes overlapping rectangular windows in front of a muted background pattern.[18]

The court previously ruled that this item was not protectible[19] (1) because the expression described is merged with the idea, (2) under the doctrine of scénes á faire, and (3) because of the limited number of ways to express the idea due to technical or design constraints.

Microsoft contends that the main element of A1, the use of overlapping windows, is a functional idea that is necessary for the "desktop metaphor" to be implemented. As evidence of the merger of idea and expression, Microsoft points to use of overlapping rectangular windows by Xerox's Smalltalk in 1979, by Lilith in 1981, and by the Perq systems as early as 1980.

Microsoft's scénes á faire argument is supported by an exhibit showing overlapping rectangular windows to have been utilized in twenty-six other commercial systems over the past decade. Microsoft videotape A. This, Microsoft asserts, is ample evidence that the feature is standard treatment in the industry, common to this particular genre of work.

Microsoft also asserts that the algorithms used to create the shape of windows generate rectangles as a quicker, easier shape than the alternatives, one that does not use too much computing power. Foley Decl ¶¶ 18, 33. Additionally,

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[18] The court uses Apple's own description of these items, as these appear in the list filed April 7, 1989, as corrected by "Errata" dated July 5, 1991. To conserve space, the final, boilerplate sentence from each description, typically in the form, "Windows 2.03 and NewWave also present the design, appearance, and style," has been omitted.

[19] Although the court used the words "not protectible" to describe its rulings in April, this was not meant to exclude *virtually identical copying* from being actionable. Accordingly, in determining whether there is a triable issue of material fact to be decided by "intrinsic" analysis, the court will consider each feature deemed "unprotectible" under a virtual identity standard, to the extent there is any separable *artistic* expression associated with that feature.

the design of a program based on a desktop metaphor requires a "muted" background to avoid distracting the user from his work.

Apple, on the other hand, argues that because Windows 1.0, as well as Xerox Star and Cedar use tiling instead of overlapping windows, this feature is not indispensable to a graphical user interface. Further, Apple offers deposition testimony that there are many ways to maximize the use of screen space without overlapping windows, such as showing only one large window at a time (i.e., "switching," infra). Apple also claims that the details of the windows are substantially similar, although those details, such as scroll bar and grow and close boxes, have been determined to be licensed.

Two parts of Apple's claim are easily decided. First, the rectangular shape of the windows is not a copyrightable feature in a computer graphical user interface or, indeed, any other medium of expression. 37 C.F.R. § 202.1(a). Second, the use of a muted background may arguably be a feature of the Macintosh interface not present in Windows 1.0, but there can be no serious contention of its protectibility. A muted background is a default image which appears on any portion of the screen not occupied by a window or menu bar and hardly can be said to represent the sort of creative achievement or expression which the law should exert itself to protect.[20]

The overlapping feature of the windows in the Macintosh interface is also unprotectible (and conceivably licensed by the 1985 Agreement). This determination requires somewhat more explanation. The advent of overlapping windows in computer interfaces was largely the product of the operating memory capacity of computers outpacing the capacity of monitor screens to display all the information the computer was able to generate. The

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[20] Because this case involves visual display copyrights, the achievement at issue is the artistic decision to use a muted background, not the programming facility which makes it possible to generate that image.

computer memory's ability to handle greater amounts of information and even at times simultaneously to run more than one application program gave rise to the need to accommodate resultingly complex visual images on the limited two-dimensional surface available on a computer screen. Only two methods or processes of displaying two or more images presented themselves to programmers: (1) *switch* from one image to another, one at a time, each image occupying the entire screen, or (2) *split* the screen, giving some screen space to each image. All methods of displaying more than one image on the monitor screen use one, the other, or some combination of these means of expression.[21] Switching is illustrated in Figures 1 and 2 which depict use of a screen to switch from image 1, a blank screen, to image 2, a screen of slanted lines. The entirety of the screen can be switched from one image to the other in the sequence or frequency desired. Figure 3 illustrates the alternative means of expression, splitting the screen between the two images noted.

[21] Scrolling is a form of switching the screen from one image to the next by adding one new line and subtracting one other at the top or bottom or at the sides of the scrolled image.

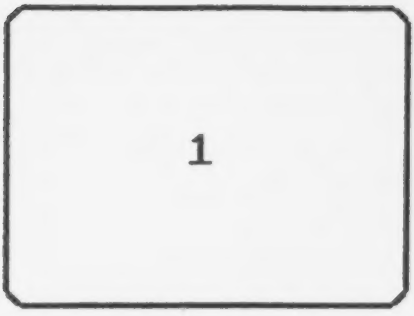

Figure 1

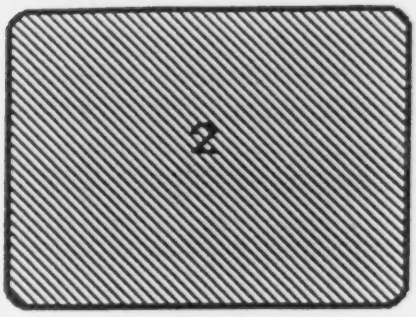

Figure 2

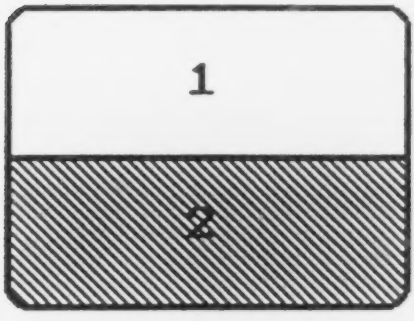

Figure 3

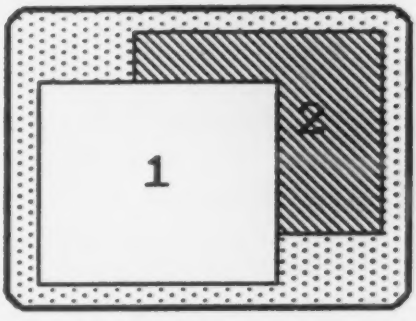

Figure 4

The tiled window approach of Windows 1.0 obviously bears close resemblance to a split of the screen of the type illustrated in Figure 3; in most, but as will be seen not all, visual displays of that work, the screen is split between or among the window images generated without switching from one window to another. The Macintosh interface, on the other hand, more plainly represents a combination of both approaches, with the muted background as the default image for any portion of the screen not occupied by one or the other of the windows (or the menu bar which constantly appears, but changes with the application running). The screen is split among the window images displayed and the muted background default image. See Figure 4 in which the blank image is the overlapping (or active) window.

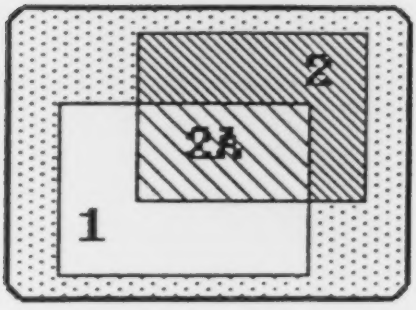

Figure 5

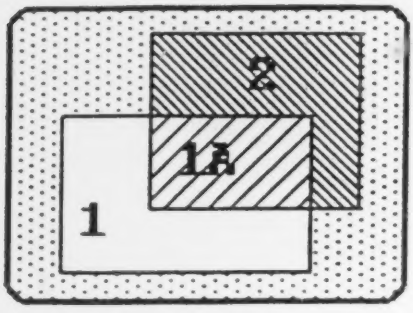

Figure 6

Because with Macintosh overlapping windows, the exposed portions of each window are shown simultaneously, the screen may be said to be *split* among or between the windows displayed; but the active window or topmost one covers the unexposed portions of the remaining or inactive window and thus the screen to that degree shows only one image at a time or employs a *switch* between or among those portions of the windows. For example, Figure 6 shows the split/switch configuration associated with the screen appearance depicted in Figure 4; the screen is split between images 1 and 2 in the portions of the screen so noted in Figure 6, but on portion 1A the slanted line image is switched off and the blank image switched on. Similarly, when Figure 5 represents the screen split/switch configuration, the images marked 1 and 2 are split between the portions of Figure 5 so denoted but in portion 2A, blank image 1 is switched off and slanted line image 2 is switched on.

The user, of course, retains the ability to switch quickly among the exposed windows by clicking on the window desired to be made active or brought to the top. But the means of expression of multiple images are limited to splitting the screen or switching the images.

Although the court earlier determined that the overlapping windows of the Macintosh interface was unlicensed by the 1985 Agreement, focusing on the ability to

overlap *completely* and obscure windows, 709 F. Supp. at 930, the tiling function in Windows 1.0 contains the ability to overlap. In Windows 1.0, tiling sometimes resulted in the information in certain windows, such as the clock, being squeezed or stretched to accommodate its surroundings, as other windows encroached or receded. Compare Figures 7 and 10 in which the slanted line image 2 is stretched out to occupy space formerly occupied by blank image 1 which is squeezed down to less screen space. But certain other windows, such as the calculator, calendar, or notepad, merely have more of their contents revealed or obscured by changes in size. Thus, as in Figure 8, a portion of the other image "overlaps." Note the portion of image 2 occupying area 1A in Figure 8 is overlapped and thus, as in the Macintosh interface, *switched* off while image 1 is switched on in this area.

Further, in Windows 1.0, the user can switch the screen spaces occupied by the images by clicking the mouse on a title bar to generate a mini-icon, and moving the mini-icon into the window whose space will be swapped. The effect is that the window moving to the larger space shows more of its contents, and the window moved to the smaller space shows less—just as if one was on top of the other, and they were flipped. Compare Figures 9 and 10.

To be sure, the overlapping windows of the Macintosh are considerably more versatile and aesthetically pleasing than the tiled windows of Windows 1.0 because the tiled windows extend in a cumbersome fashion completely along one axis or the other, making either width or heighth uniform. Moreover, in a tiled window system, the windows must shrink as more and more of them are added to the screen whereas the ability freely to re-size windows in the Macintosh interface without affecting the size of others allows the user to size them in relation to the data they contain or for any other reason.

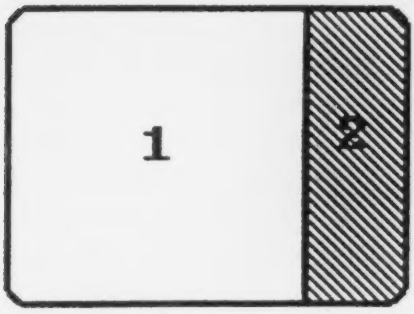

Figure 7

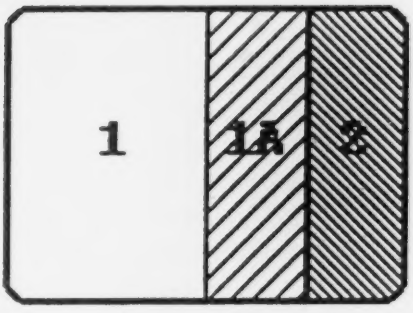

Figure 8

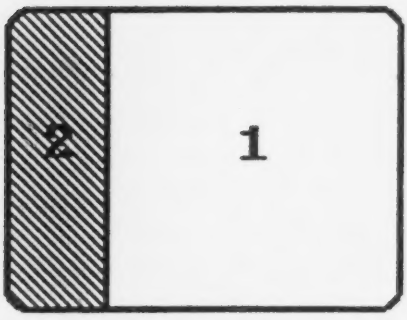

Figure 9

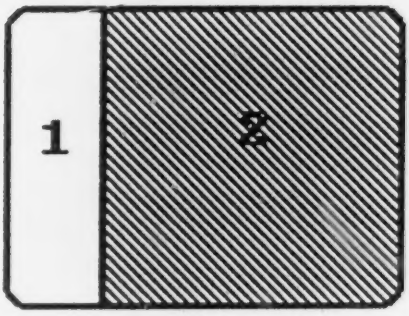

Figure 10

Because a programmer must choose between switching images or splitting the screen, the means of expression are limited, and merger applies at least to the basic arrangements claimed in similarity A1. Moreover, of course, one of these means—splitting the screen—was plainly licensed by the 1985 Agreement and arguably the "overlapping" feature of Windows 1.0 provides at least a basis for Microsoft to contend that this feature is also licensed. Notwithstanding Microsoft's possible contention, the court believes that overlapping windows are not covered by the 1985 license as Microsoft's advertising laid some stress on the fact that Windows 1.0 had "No Overlapping," so "you never 'lose' a window." 709 F. Supp. at 930. Microsoft's comparative advertising should set some limit on what it can claim was licensed.

In any event, the Macintosh interface at most combines a possibly unlicensed switching technique, the only other means of expression, to that plainly licensed, splitting. Accordingly, the scenes a faire doctrine ought also to apply. Finally, use of overlapping windows in the Xerox, Lilith and Perq systems in the early 1980s shows beyond question that this concept is not original to Apple. See Microsoft videotape A. The court's April ruling on A1 stands.

A8 The window design and layout in Macintosh includes windows which may appear partly on and partly off the screen.

The court previously ruled that this feature was unprotectible under the merger and scénes á faire doctrines. Microsoft demonstrated that the feature was used in both Xerox's Smalltalk and in the Perq system prior to its use by Apple, evidence that it is a standard treatment in the industry. Microsoft also argues that the idea of overlapping windows, and even the broader, unitary idea of the "desktop metaphor" that Apple urges upon the court, requires this feature, because free movement of the items on the work desk cannot be achieved in the absence of this feature.

Apple argues that this feature is not indispensable to a graphical user interface employing a "desktop metaphor," for at least four systems shown in Microsoft's videotape A apparently lack this feature—Star, Sun View, View Point, and Metaphor.

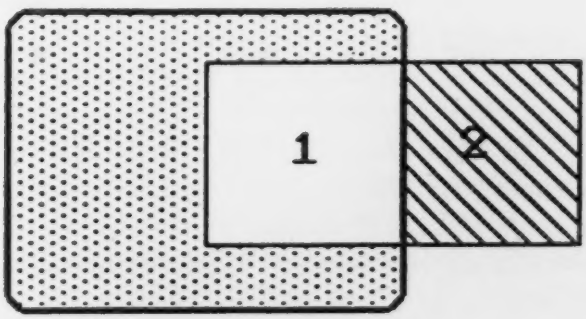

Figure 11

The ability to move windows partly on and partly off the screen is, like tiled windows, a product of splitting the screen between that portion of the window left on the screen and all the other images displayed simultaneously, and switching off that portion of the image dragged off the screen. See Figure 11. This also represents an expression of very limited means—sometimes showing one portion of the window while at other times showing another part and, of course, switching off that portion of the window dragged off the screen. Again, while the appearance of a window may represent protectible expression, the ability to move it part on or off the screen is indispensable to the convenient manipulation of information contained in these sub-screens and thus is unprotectible. This portion of the April ruling stands.

B1 The design and layout in Macintosh includes the top-most overlapping window displayed as the active window.

This feature was previously found unprotectible by the court due to merger of idea and expression and as a standard industry feature, under scénes á faire. It appears that 17 of the 27 systems shown in Microsoft's videotape A have this feature. Indeed, it is hard to imagine the usefulness of an obscured window being the active window, under the so-called desktop metaphor or any other functional design, although apparently some systems have this option. The active top window idea was first used at Xerox PARC prior to its incorporation in the Lisa system by Apple. These reasons suggest that making the topmost window active is a standard industry feature.

Although Apple contends that the top window need not be the active window, citing the systems in the scénes á faire videotape in which other windows can be active, feature B1 clearly appears to be indispensable to the useful employment of the overlapping windows idea. Making the topmost window the sole active window serves the utilitarian function of helping to avoid the accidental input or output of information or manipulation of icons in a window for which this was not intended. This feature also overcomes

the constraint imposed by the relatively fixed amount of screen space generally available in most monitors; operating memory has increased greatly in relation to the screen space able to accommodate it, making necessary sophisticated means to manage the information in memory. Furthermore, making the topmost window the active one is no more expression than reading the page to which a book is opened or working on the paper which is on the top of a stack. Instead, this is the description of a process that is inseparable from the idea of overlapping windows, and is thus but an unprotectible idea. Finally, the only expression that can be said to be involved, the graphics that indicate that a particular window is the active window, is feature A4, and covered by the 1985 license. 717 F. Supp. at 1433-34.

B2 Macintosh design animation brings a window to the top of a stack of overlapping windows when the mouse is clicked on it.

Feature B2, like feature B1, does not seem to implicate any expression at all. This feature was previously found unprotectible under merger and scenes a faire, a ruling that is itself a bit of an understatement. Clicking the mouse to bring a window to the top of a stack establishes a hierarchical or priority relationship between or among the windows visible on the screen, a concept of great generality or abstraction. By hiding or obscuring the other windows, this process emulates a third dimension in the otherwise two-dimensional computer screen and "defines a partial ordering among graphical objects." Tomihisa Kamada, *Visualizing Abstract Objects and Relations* at 44 (World Scientific, 1989). Apple understandably does not expressly refute this in its papers, and the prior ruling stands.

D1 Macintosh design animation drags a gray outline of the window along with the cursor when the mouse is pressed on a window's title bar.

Feature D1 was held unprotectible under scénes á faire and due to the limited number of ways to express its idea. Microsoft offers the declaration of Professor James D. Foley to support its contention that hardware constraints dictate this feature. Moving merely the outline of a window,

instead of the entire window and its contents, requires far less computing power, and is a common solution of systems running on less-powerful computers. Foley Decl ¶ 24. Nineteen systems employing this feature are displayed in Microsoft's videotape A.

The developers of the Lisa and of Windows 2.03 and 3.0 attempted to move the entire window or a filled-in rectangle, and found this impractical due to technical constraints. Tesler 2/27/90 Dep at 135:25-136:2; Daniels Dep at 87:10-23; Konzen Dep at 120:21-23; Barrett Dep at 97:20-98:16. Apple nonetheless contends that there are other ways of expressing this idea, and that many were considered by their designers. As one example, Smalltalk-76 moves a single corner of the window. Systems that move the entire window or a shaded rectangle are also cited, although it is clear that some, if not all, of these systems have more computing power at their disposal.

The movement of just a corner of a window is not compatible with the idea of manipulating multiple windows for users' convenience in organizing information. Users must know what area the "piece of paper" or workspace they are moving will cover. The outline of the window is the obvious graphic for this idea, and its use in over a dozen systems reinforces this conclusion. The ruling on this item stands.

D2 Macintosh design animation moves a window to the new position as soon as the mouse is released after dragging the window's outline.

Like B2, this describes only the process by which the visual displays are moved. Using the mouse in this way is standard in the industry, and is inseparable from the idea of direct manipulation by mouse of multiple windows. The prior ruling under scenes a faire and merger stands.

D3 Macintosh design redisplays all newly exposed areas on the screen after a window is moved.

The court previously ruled this feature unprotectible under merger and scénes á faire. This feature appears in 25 of the systems in Microsoft's scenes a faire videotape Exhibit A. At least two of the systems, the Lilith and the Perq,

preceded Apple in use of this feature. Microsoft argues that this is a functional feature that is vital to the idea of multiple, overlapping windows, as well as an idea in and of itself.

Apple asserts that the "graphic holes" that are left in areas of windows previously obscured, such as in Smalltalk-76, show that it is not necessary that these blank spaces be immediately refreshed. The absence of information, however, cannot be a useful feature in a system designed to convey information to its users, and such "graphic holes" would represent technological shortcomings and hardly serve aesthetic considerations. The prior ruling on this feature stands.

B. *Iconic Representation.*

The Apple works in suit use icons that represent familiar objects from the office environment to facilitate the organization of information stored in the computer's memory. At the outset, iconic representation is not original to the Macintosh interface. In the context of computer graphics, the term appears to have originated with David Canfield Smith who, working at Xerox PARC in the mid-1970s, adopted the term as representing something more than a symbol, an embodiment of its properties. Dep Exh 360. In the Macintosh interface, icons represent files, directories, and applications.

G5 The design and layout of icons in Macintosh includes display of icons on the screen background behind any open windows.

The court previously found this feature to be unprotectible under merger and scénes á faire. Twenty of the systems in Microsoft's videotape A contain this feature, demonstrating this is common to programs that incorporate the ideas of direct manipulation of icons and windows. Item G5 represents an idea unto itself. Convenience in the highly constrained space available on a computer screen dictates that users be allowed to place windows over icons when operating within a window or moving one around on their computer screens. The ruling stands.

G6 The design and layout of icons in Macintosh includes the icon's title (when displayed) centered beneath the icon.

G14 The design and layout in Macintosh presents the name of an object by displaying the name centered below the object's icon.

Feature G6 was previously found unprotectible under scenes a faire and due to the limited number of ways it could be expressed. Eleven of the systems in Microsoft's videotape A center the icon title below the icon. Practically speaking, an icon title can be placed either inside the icon or if outside then above, below or along a side of the image. If above or below, the title can be centered, justified right, or justified left. With only nine different places for a title, one author cannot appropriate for himself the exclusive right to one of these positions without the most pernicious consequences on the opportunities for creative expression. This ruling stands. Apple concedes that G14 is duplicative of item G6, Apple Recon App A at 28 n 12, so the same ruling applies.

G12 The design and layout in Macintosh presents icon images shaped like a page with a turned-down corner to indicate objects of type other than "directory."

I1 The design and layout in Macintosh presents the term "folder" to denote a disk directory.

Apple does not appear to offer any argument rebutting the determinations that item I1 is excluded by § 102(b) and that item G12 lacks originality and would be afforded at best limited protection because of merger. Reviewing the evidence in the record, the court is satisfied that these determinations were properly made in April, and that there is no triable issue of material fact on these points.

G10 The design and layout in Macintosh associates a different icon image with each type of object and indicates the type of each object by presenting the object as the icon image corresponding to its type.

Item G10 was previously found to lack originality, to be an unprotectible idea, and to flow naturally from the underlying idea, under scénes á faire. Apple argues that the

appearance of this iconic system is what is unique and separable from the ideas represented. The court finds this argument unpersuasive, as the specific images of the icons are the subject of separate items on the lists of similarities. No artistic expression is described or indicated by this item, and it remains an unoriginal, unprotectible idea.

G11 The design and layout in Macintosh presents an icon image shaped like a file folder to indicate objects of type "directory."

Item G11 was previously found to lack originality. In its response to Apple's motion for reconsideration, HP urges the court to change its prior ruling denying HP's motions as to this item under § 102(b) and the various limiting doctrines, claiming that the use of an image of a file folder to represent a directory is but an unprotectible idea. The court disagrees. The idea behind this item is the use of a familiar object from the office environment that typically contains other objects, as the icon to represent a directory.

Merger, limited number of ways, and indispensable expression or scénes á faire do not limit the protection for the expression of this idea as a file folder. A file cabinet, a desk drawer, a bookshelf, a binder, an office safe, even a cardboard box could have served the same function. The court does not change this prior determination.

As to originality, given the idea as defined above, the expression is the use of an icon resembling a file folder. This had been used prior to the release of the Lisa in the Xerox Star, and was also employed in the IBM Pictureworld research report. Dep Exh 279. Lisa designer Larry Tesler, then a Xerox employee, had access to the Star during its development in the 1970s, although he apparently exempted himself from certain Lisa design team discussions because of this knowledge. Compare Tesler 2/27/90 Dep at 19:7-20; Tesler 1/20/92 Dep at 20:18-19, with Tesler 1/20/92 Dep at 31:20-24, 35:7-18.

Several of the Lisa designers were at the June, 1981 public unveiling of the Star at the 1981 National Computer Conference. Daniels Dep at 69:11-70:7. One Lisa designer claimed that this was the source of the idea to use

"real-world objects" as icons. Id at 71:18-72:18. Although there is evidence, in a draft of an article by Apple employees on the history of the Lisa, that by late summer 1980 Apple had designed a Lisa interface in which a precursor to the file folder icon might be discerned, see Dep Exh 324, Figure 4, an earlier draft of this document reveals that designer Bill Atkinson's copy of the IBM Pictureworld research report influenced the decision to use icons in the Lisa interface. Exh 23 to HP Originality Motion at AM 011007 (Dep Exh 313). All told, there is ample and uncontrovertible evidence in the record showing access to the prior works on the part of Apple employees.

The Star, Pictureworld, the Lisa and the Macintosh all used an icon shaped like a file folder as their expression of the idea of a container from the office to represent a directory. Comparing the artwork associated with the various renditions, all show common file folders with the tab on the top left. While they differ in slight details, these depictions could not but be found substantially similar in all material respects. Accordingly, the decision on lack of originality stands.

G13 The design and layout in Macintosh presents different images within the outline of a generic page icon to indicate objects of different non-directory type.

Item G13 was previously found to be an unprotectible idea, lacking in originality, and due limited protection under the merger doctrine. Read literally, it is no different from the Star's use of distinguishing text within icons. The court reaffirms its prior ruling on this item. Since item G13 does identify certain expression—the images inside the page icon—that can be compared, however, the actual depiction of the images inside the page icon can be protectible.

H2 The design and layout in Macintosh displays the special discard folder as an icon resembling a trash can (as does the Lisa).

HP also urges the court to reconsider its ruling on item H2, the trash can icon. HP's argument boils down to the assertion that the literal depictions in NewWave and the

Apple works are so dissimilar that Apple could only mean by this item the general idea of a trash can icon. The difference between the IBM Pictureworld drawing and the Apple trash cans is sufficient to find originality, and HP's arguments pertain to the intrinsic stage of analysis, and will be addressed in that context. The prior ruling on H2 stands.

H3 The design and layout of Macintosh presents the name "Trash" beneath the special discard folder. The name "Waste Basket" is presented in Lisa. NewWave displays the name "Waste Basket" beneath the special discard folder.

The court previously found H3, the name "Waste Basket," to be an unprotectible short phrase under 37 C.F.R. § 202.1(a), and to be subject to limited protection because inseparable or flowing naturally from its idea. Apple has not addressed the "short phrase" ground for decision, which in any event is upheld. A short phrase or name might have some relevance in determining the copyright in a literary work, but is merely an unprotectible aspect of a visual work. The court reverses the decision on the limited scope motion. The idea involved is the use of a common object to represent the place to discard objects, and is not limited to the use of an object from the office environment—witness Apple's use of an outdoor trash can rather than a waste paper basket. The name "Waste Basket" is not essential to this idea, for the icon could just as well have been a paper shredder, a toilet, a recycling bin, or perhaps, for the less environmentally fastidious, an open window. Thus, H3 is not subject to the merger or indispensable expression doctrines, but is unprotectible under 37 C.F.R. § 202.1(a).

I4 The design and layout in Macintosh presents the disk files and subdirectories ("objects") contained in a folder as icons arranged two-dimensionally within the folder's window.

Item I4 was previously ruled unprotectible as an idea, and under scenes a faire doctrine as flowing naturally from the idea of using direct manipulation techniques, icons, and windows to organize information conveniently on a

computer screen. There being no expression implicated at all by I4, the ruling stands.

C. *Object Opening/Closing.*

The computer programs at bar utilize the opening and closing of objects as a means of retrieving, transferring or storing information.

G25 The Macintosh design animation responds to a double-click on an icon in the same way it would respond to selecting that icon followed by choosing the "Open" menu item.

G30 Macintosh design animation opens a folder icon into a corresponding window when it is selected and the 'Open' menu item is chosen.

G31 Macintosh design animation opens an application window displaying an object when a non-folder icon is selected and the 'Open' menu item is chosen.

H4 The design and layout in Macintosh permits the user to open the special discard folder into a window as if it were an ordinary folder.

I2 The design and layout in Macintosh associates with each folder an optionally-open window which when open displays that folder's contents.

Apple does not assert protectibility "with respect to the act of double clicking on an icon or use of the word 'Open' as a menu command," Recon App A at 17-18 n 7, and thus the prior ruling on features G25, G30, and G31 will not be reconsidered. Apple also does not appear to contest the prior ruling that H4 and I2 were unprotectible ideas, unoriginal, and not protectible under scénes á faire. Reviewing the record, the court is satisfied that these rulings were correctly made in April.

H5 The design and layout in Macintosh permits the user to move an object out of the special discard folder's window and thereby revoke his decision to delete the object.

Item H5 appears to describe an unprotectible idea or process, the ability to reverse a decision to discard something. This flows naturally from the idea of a discard file, and originated in the Pictureworld report. Apple claims

that the visual displays associated with this item are protectible, but these displays do not differ from those associated with the movement of any object out of a window, which is indispensable to the ideas of direct manipulation of icons and windows. Accordingly, this ruling stands.

G28 Macintosh design animation displays a rapid sequence of expanding rectangles beginning at the icon's position and ending at the window's position when an icon is opened into a window.

G29 Macintosh design animation displays a rapid sequence of expanding [sic] rectangles beginning at the window's position and ending at the icon's position when a window is closed into an icon.

Items G28 and G29 describe the sequence of expanding or contracting rectangles ("zooming rectangles") which signify that an icon has been opened into a window or a window closed into an icon. HP's motion that these features be given limited protection because of the limited number of ways to express the underlying idea was previously granted. The idea of providing to the user of a computer information connecting the open window to the icon from whence it came, upon reflection, does not seem to require the use of graphics such as "zooming rectangles." Even considering that rectangles may be easier for a computer to generate, see discussion of item A1, supra, it should not be hard to match an icon to an open window by instead showing, say, parallel lines growing in length until they reach the proximate size of the new window, and shrinking back into the icon when the window is closed, in a "slinky" effect.

The fact that only Lisa, Macintosh, GEM, and NewWave use a "zooming rectangles" feature convinces the court that any limit to the number of ways to match window and icon is not because of technical or design constraints so much as a lack of motivation on the part of software designers to provide a feature that performs this function. In the least, this is a triable issue of material fact. HP's motion for partial summary judgment on limited scope of protection is DENIED as to features G28 and G29.

G33 Macintosh design animation indicates that a folder icon has been opened into a window by displaying the icon as dimmed.

The dimming of an icon upon opening into a window, G33, was previously determined to be unoriginal and unprotectible under the merger doctrine. Apple argues that the Star did not gray, but rather "whited out" selected icons by removing the border and other black lines of the icon, in contrast with the graying effect it employs. The idea of making a selected icon less distinct can only be done by darkening the white lines or lightening the dark lines, short of wholesale changes in appearance.[22] But HP in arguing that this is standard treatment in the industry can only point to the non-iconic Smalltalk and the Star, which bleached out details rather than shading them.[23] There is insufficient evidence showing that this "dimming" is standard treatment, and it is sufficiently original to be protectible. HP's motions as to G33 are DENIED.

D. *Menus.*

Menus are employed in graphical user interfaces to store information or functions of the computers in a place that is convenient to reach, but saves screen space for other images.[24]

G27 The design and layout in Macintosh includes a menu item for moving icons onto a grid called "Clean Up". The same menu item in Lisa is called "Straighten Up Icons". NewWave presents the same menu item as "Straighten Up".

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[22] Apple's expert suggests an alternative is having the icon change size, shape, or color. Schneiderman 3/30/90 Decl ¶ 17.

[23] This was also the technique employed in the Lisa.

[24] Menus appear in Xerox Smalltalk at the window tab to move the window by means of a menu command.

I6 The design and layout in Macintosh presents a menu item on the "File" menu which allows the user to create a new folder within an existing folder.

I7 The design and layout in Macintosh automatically supplies a default name for a newly created folder.

I8 The design and layout in Macintosh presents a menu item on the "File" menu which allows the user to print a listing of a folder's contents on the printer.

I9 The design and layout in Macintosh presents a menu item on the "Edit" menu which allows the user to select every object in a folder at once.

I10 The design and layout in Macintosh includes a menu item for selecting all objects called "Select All". The same menu item in Lisa is called "Select All Icons" in the Lisa.[sic] NewWave calls the same menu item "Select All Items".

Apple's reconsideration papers do not mention item I8, previously found unoriginal and functional. No evidence is put forward to challenge the court's prior determinations that G27, I6, I7, I9, I10, and J9 are unprotectible under § 102(b), that I7 is unoriginal, and that I7, I9, and I10 are subject to limited protection under the merger doctrine. Reviewing the record and finding no triable issue of material fact, the court affirms the granting of HP's motions as to those items, and further notes that there are no artistic features of visual displays implicated by any of these items.

I11 The design and layout in Macintosh presents a menu called "View" with a number of menu items which let the user choose whether a folder's window displays its contents as an arrangement of icons or as a tabular list ordered by the name, type, or modification date of its individual objects.

Item I11 is licensed except to the extent it uses icons. 759 F. Supp. at 1452. The use of icons is an unprotectible idea, and offering iconic representation as an alternative to a directory list merges with the idea of using icons and windows to organize information conveniently on a

computer screen. The appearance of no particular icon is implicated by this item, and the prior ruling under § 102(b) and the merger doctrine stands.

J8 The design and layout in Macintosh presents a menu item which produces a dialog displaying certain attributes of the object represented by the currently selected icon.

J9 The design and layout in Macintosh presents a menu item for producing the attributes dialog which is called 'Get Info'. The same menu item is called 'Attributes of X' in Lisa (where X is the name of the object. NewWave presents the same menu item as 'Attributes'.

J10 The design and layout in the Macintosh attributes dialog presents the object's icon, name, type, creation date, modification date, size, and user-specified comment.

The court previously found J8 to be an unprotectible idea under § 102(b), lacking of originality, and subject to limited protection under the merger doctrine. Item J9 was ruled an unprotectible title under 37 C.F.R. § 202.1(a), and limited by merger doctrine. The court found J10 lacking originality, due limited protection under scénes á faire, and an unprotectible blank form, under 37 C.F.R. § 202.1(c). Taking these three items together, only J10 implicates a protectible visual display. The idea of a "dialog box"—licensed in its generic sense, 717 F. Supp. at 1434—that shows the attributes of an object is merely an idea, and is inseparable from the idea of using icons along with the licensed features to facilitate the flow of information from computer screen to user. This idea was originally used in the Star, although in a different form of expression, the "property sheet". Exh. 237 Figure 3. The prior ruling on J8 stands. The court has already noted that item J9, the name "Attributes," has been reaffirmed as an unprotectible word. See also discussion of H3, supra. Like the variety of names one can adopt for a discard file, the word "attributes" hardly corners the market of useful descriptions for this concept. Macintosh uses "Get Info," and "vital statistics" is just one of a number of other

possibilities. Thus, the court finds J9 not subject to merger, although unprotectible under 37 C.F.R. § 202. 1(a). The court is also unable to locate any use of the word "Attributes" in the Lisa system, despite the claim in the list of similarities. The motion is also granted as to originality.

Item J10 describes the categories of information contained in the attributes dialog. HP appears to offer little evidence that this arrangement is unoriginal, although the arrangement does naturally flow from the use of icons to represent documents, which traditionally have been represented by listings that includes name, creation date, and size. This item appears to the court to bear a strong resemblance to the work at issue in *Baker v Selden*, in which the Supreme Court found blank accounting forms not protectible under copyright laws. 101 U.S. at 107. This dialog box is not protectible except to the extent it contains identifiable artwork or a unique arrangement, in the latter case receiving protection only against virtually identical copying. See *Harper House*, 889 F.2d 197. HP's motions under § 102(b) and limited scope are GRANTED, and the motion on originality DENIED, as to this item.

E. *Icon Manipulation.*

In the works at suit, icons are manipulated by the computer user to control operation of the computer, facilitating the organization of the information stored in the machine.

G4 Macintosh design animation moves an icon to any part of the screen by dragging it along with the cursor when the user presses the mouse on the icon. Windows 2.03 and NewWave (within the NewWave Office windows) also present the same animation design, appearance and style.

This feature was previously found unprotectible under merger and scénes á faire. Like items B2 and D2, the ability to move icons to any position on a screen is a functional process, indispensable to the idea of manipulating icons by mouse. Only the separable artistic expression involved in moving icons can be protectible—the visual changes to the

icon as it moves, the image, if any, that remains in the original position. The prior ruling stands.

G16 The design and layout in Macintosh initiates editing of an icon's name when the mouse is clicked on the name.

G17 The design and layout in Macintosh terminates only editing as icon name and renaming the object associated with the icon if the user responds to any operation other than name-editing.

G18 The design and layout in Macintosh permits the user to select any combination of one or more icons within a folder window.

G20 Macintosh design animation permits the user to move an icon to a new position by pressing the mouse on the icon, moving the mouse, and releasing the mouse when the new position is reached.

G23 Macintosh design animation moves an icon from one window to another by moving the corresponding object from one disk directory to another.

G32 Macintosh design animation presents the window in the same size and position it had the last time it was open when a folder icon is opened into a window.

Apple does not seek reconsideration of the determination that G20 was unoriginal, unprotectible under § 102(b), and due limited protection under scénes á faire. Apple Recon App A at 22 n 10. It offers no evidence or argument concerning items G16, G17, G18, G23, and G32. Reviewing the record, the court finds no triable issue of material fact concerning the April determination that these items are unprotectible, and those rulings stand. Additionally, the court cannot find any separable expression associated with these items, for consideration in any intrinsic analysis.

G2 The design and layout in Macintosh stores permanently on disk the position of icons so that at the beginning of a session all icons have the same

positions they had at the end of the previous session.

Item G2, previously found unoriginal, an unprotectible procedure, and limited in protection by the merger doctrine, is only explicitly challenged by Apple on the first ground. This item describes but a process, and is no more expression than the fact that when a reader returns to a book that he placed down open to a certain page, it will still be open to that page. The prior ruling stands as to this item.

G24 Macintosh design animation presents an icon in a folder when the icon is moved on top of the folder icon.

Apple in its reconsideration papers now describes item G24 as "Folder icon changes appearance (inverse video) when another icon is moved on top of it." Recon App A at 21. This, however, does not happen in NewWave. The court finds the new language irrelevant, and affirms its prior ruling under the original language of G24. This is a procedure that naturally flows from the idea of direct on-screen manipulation of icons and windows to facilitate the organization of information on a computer screen.

G1 The design and layout in Macintosh initially displays a work area on which icons can be placed and which is always displayed behind its windows.

The court in April granted all three of HP's motions as to item G1. Apple now argues that G1 includes the idea that icons could be placed anywhere on the desktop, which is more properly item G4, determined to be unprotectible under merger and scénes á faire, supra. HP is correct in asserting that the gray background is an unprotectible blank form, *Bibbero Systems, Inc. v. Colwell Systems, Inc.*, 893 F.2d 1104, 1107 (9th Cir. 1990), and that the placement of icons on a background was first utilized in Smalltalk, where tabs represented collapsed windows. Apple's efforts to distinguish the appearance of icons on the desktops of Macintosh and the Star are unavailing. Compare Screen Shot 6 to Apple Recon App A with Exh 3 to Apple Resp to HP Orig Motion. Finally, this ability to place icons on a blank background is inseparable from the idea of direct

manipulation of icons and windows by a computer user to facilitate the organization of information on the computer screen. The prior ruling on this item stands.

G15 The design and layout in Macintosh presnets [sic] the user to change the name of an object by editing its icon's name directly where it appears on screen.

As originally worded, G15 was found to be an unoriginal, unprotectible idea that would get limited protection under scénes á faire. Apple now broadens the item to encompass features that would not have been obviously included, such as changing the appearance of the cursor to an "I-beam" and presenting the title to be edited in inverse video. Apple Recon App A at 32:10-15. To the court, this still sounds like a typewriter manufacturer attempting to copyright the ability of its machine to place letters on paper directly on a roller. This procedure, even considering the broadening language, does nothing more than allow a user to place his own words in a particular space on a computer screen. That inverse video is used to show the workspace, and the cursor becomes an I-beam, are common methods of relaying information to the user. The prior ruling on this item stands.

G19 Macintosh design animation indicates that an icon is currently selected by changing both the icon and its name into reverse video.

Item G19, indicating icon selection through use of inverse video, was determined in April to be unoriginal and scénes á faire to GUIs. The Smalltalk system highlighted its window tabs in this manner. Dep Exh 227. After the Lisa designers chose to similarly highlight their folder tabs, Dep Exh 292 at AM003704, the Star was introduced, using inverse video with full-blown icons. Dep Exh 361, Figure 4. This method is unoriginal to Apple and can be considered a standard treatment of the medium. The prior ruling is affirmed.

G21 Macintosh design animation permits the user to move several icons at once by selecting all of the icons, then dragging any one of the icons as if it alone were selected.

Item G21 was found in April to be an unprotectible idea, and expression inseparable from its underlying idea. Apple argues that the appearance of the icons when all are selected is the similarity being described. To the extent there are visual displays that correspond to this idea, however, these are the selected icons portrayed in inverse video, which is the unprotectible item G19, and the appearance of icons when they are being moved, also found in item G4. Any artistic expression that is implicated in this item will be considered as part of G4. The prior ruling on G21 is upheld.

G26 The design and layout in Macintosh presents a menu item which moves all the icons in a window so that they fall on an invisible grid.

Item G26 describes the Macintosh's "Clean Up" feature. The court in April ruled this feature unoriginal, an unprotectible procedure, and the subject of limited protection due to merger of idea and expression. Apple argues this was original to the Lisa, not occurring in the older iconic system of Xerox, the Star. The Star, however, would allow icons only to be placed on points in an invisible grid and thus had no need for a "clean up" feature. The use of a grid to keep icons neatly arranged originated in the Star. The "Clean Up" feature is but an idea or procedure, and is inseparable from the idea of using icons that are directly manipulated on a computer screen to facilitate the organization of information. Item G26 merely allows a user to make order out of chaos, and is associated with no unique, separable artistic expression. Cf *Fabrica*, 697 F.2d 890 (useful article limitation to protection of pictorial, graphic and sculptural works). The prior ruling is affirmed.

H1 The design and layout in Macintosh presents a special discard folder into which the user moves objects he wishes to delete.

The only visual displays associated with item H1 are embraced by item H2. The idea of a discard file is unoriginal, previously appearing in the IBM Pictureworld research report to which Lisa designers had access, see discussion of item G11, supra, and is an unprotectible idea which naturally flows from the idea of using iconic

representation to aid computer users in the organization of information. The prior determinations of unprotectibility as to item H1 are not changed.

H6 The design and layout in Macintosh does not permit the user to move certain objects called "tools" into the special discard folder. Macintosh stops and ask the user for confirmation before completing such moves.

Item H6 merely describes an idea. To the extent visual displays are involved, these are covered by the general license of dialog boxes, 717 F. Supp. at 1434. Even this idea was unoriginal to Apple, see Atkinson Dep at 116:18-23, and is inseparable from the idea of employing icons to help computer users organize information on a computer screen. The prior rulings of unprotectibility under § 102(b) and due to lack of originality and merger of idea and expression are affirmed.

J11 The design and layout in the Macintosh attributes dialog permits the user to change the associated object's comment by editing it directly where it appears on screen.

Item J11 was previously determined to be an unprotectible procedure, lacking in originality, and due limited protection because it naturally flowed from the underlying ideas. This ruling is affirmed. See discussion of items G15, J10, supra.

F. *Summary.*

The court GRANTS Microsoft's motion that the following items from the list of similarities are not protectible under copyright: (1) under the scénes á faire doctrine, items A1, A8, B1, B2, D1, D2, D3, G4, G5, G6; (2) due to merger of idea and expression: A1, A8, B1, B2, D2, D3, G4, G5; (3) due to the limited number of ways to express the idea: A1, D1, G6. Of these items, only A1, D1, G4 and G5 could possibly be associated with unlicensed artistic expression to be compared under the "virtually identical" standard in the course of intrinsic analysis. This would be the appearance of the gray outline of a moving window, the change in appearance of icons when moving,

and any special, non-functional artistic touches involved with the appearance of windows and icons that are overlapped, other than the art used to identify the active window, licensed item A4.

The court GRANTS HP's motion for summary judgment under § 102(b) as to the following items: G1-2, G10, G13, G15-l8, G20- 21, G23-27, G30-32, H1, H3-6, I1-2, I4, I6-11, J8-l1. The motion is DENIED as to items G11 and H2. The court GRANTS HP's motion for partial summary judgment based on lack of originality as to the following items: G1-2, G10, G12-13, G15-l6, G19-20, G25-26, G30-31, H1, H4-6, I2, I7-8, J8-9, J11. The originality motion is DENIED as to items G11, G24, G33, H2, J10.

HP's motion for partial summary judgment on limited scope of protection is GRANTED under the merger doctrine as to the following items: G2, G12-13, G17-18, G25-26, G30-32, H3, H6, I7, I9-11, J8. The motion is GRANTED under scénes á faire for these items: G1, G10, G15-16, G19-21, G24, H1, H4-5, I2, I4, J10-11. This motion is DENIED as to items G11, G28-29, G33, H2-3, J9.

Item G14 is withdrawn as being duplicative of item G6. The determination of HP's motions has resulted in all items alleged against HP to be found unprotectible or only protectible from virtually identical copying, with the exception of items G28, G29, G33, and H2. The only items that might have artistic expression that can be identified and protected against virtually identical copying are G13, G24, and J10.[25]

VI.

After granting Apple's motion for reconsideration, the court on May 12, 1992 heard argument from counsel for Microsoft and Apple on Microsoft's "Motion for Partial Summary Judgment Dismissing Apple's Claim Against Windows 3.0." Counsel, with the aid of the machines left with the court, identified and compared the Windows 3.0 visual displays described in the Second Supplemental List as

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[25] In addition to items A1, D1, G4 and G5.

"Additional Similarities" with their counterparts in the Apple works.

Counsel for Microsoft and Apple had in the weeks prior to the May 12 hearing submitted letters to the court regarding whether the court's determinations of the limited scope of protectibility of certain items from the initial list of similarities, reconsidered in section V, should carry over to items from the Second Supplemental List that appear to correspond to those items.[26] Clearly, the answer is yes.

The purpose of the dissection undertaken in section V is to isolate the protectible expression in the Apple works, using Apple's list of alleged similarities between its and defendants' works. If Apple has little or no property right to items alleged to be found generally in Windows 2.03 or NewWave, then the recurrence of these items within Windows 3.0's Program Manager and File Manager cannot somehow enhance Apple's property rights. Further, Microsoft in its support memorandum *did* put forward lack of originality and lack of protectibility arguments on these items, which mirror the analysis used by the court in section V. Finally, as Microsoft notes, Apple's own FRCP 30(b)(6) witness acknowledged the redundancy in the items from the original list and Second Supplemental List.[27]

In the course of considering the "additional similarities" from the Second Supplemental List, the court, following the convention adopted in section V, reproduces the descriptions supplied by Apple.[28] Where a limiting doctrine applies, only those items associated with separable artistic expression, that a reasonable jury could find to be virtually identical copies of the expression in the Apple works, can

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[26] Letter of D.T. McDonald, April 23, 1992; Letter of J. E. Brown, May 7, 1992; Letter of D.T. McDonald, May 8, 1992; Letter of J.E. Brown, May 11, 1992.

[27] Capps Dep at 372-73, 392-94, 397, 407, 409-12.

[28] Adding the system of sub-designation used in Microsoft's papers, such as "X2(i)."

survive this summary judgment motion. See *Frybarger*, 812 F.2d at 530.

A. *Program Manager.*

X1 Windows 3.0 has replaced the text-based filing systems of Windows 1.0 and Windows 2.03 with a graphical filing system (called Program Manager) that makes extensive use of icons, similar in nature to the graphical filing system of the Macintosh audiovisual works.

X1(i) In Program Manager, application programs, documents, and groups of application programs or documents are represented by icons, as they are in the graphical filing system of the Macintosh audiovisual works.

Items X1 and X1(i) only refer to the idea of using icons in a filing system, which is not protectible. See discussion of item G10, supra.

X1(ii) The arrangement of the icons in both systems is similar, with the icons generally arranged in rows and columns in one of the first displays that the user sees and which the user uses to select and initiate work activity.

This is unprotectible as an idea, and under scénes á faire. See discussion of I4, supra.

X1(iii) All visible icons have titles centered underneath the icon.

This is duplicative of item G6, which is unprotectible under scénes á faire and due to the limited number of ways it can be expressed.

X2 In both the Windows 3.0 Program Manager and the Macintosh audiovisual works, the use and movement of icons are visually depicted in a similar manner, specifically [items X2(i)-(viii)]:

X2(i) When an icon is moved around within a window and from one window to another, the movement is depicted through animation;

This is the same as item G4, and is covered by the court's merger and scénes á faire determinations, supra. To the extent that there are changes in the appearance of the

icons while being moved, these are compared for virtual identity. The court finds that the animation involved is not virtually the same. In Program Manager, a black-and-white version of the icon is moved, its title disappears, and no image is left in the former location. In the Lisa, the details of the icon, more or less, are moved in dotted form, leaving behind an outline of the icon bleached white, and the title in inverse video. In the Macintosh, a dotted outline of a square attached to the rectangular outline of the icon's title is moved (resembling an "inverted T"), leaving behind the image of the icon and its title, in inverse video. Given the operation of merger and scénes á faire, these differences are significant enough to prevent this item from being grounds for infringement.

X2(ii) When an icon is "selected," the selection is depicted by a change in the icon's appearance;

Item G7, "design animation indicates a selected icon when it is clicked on with the mouse," was previously determined to be licensed. See Order filed April 15, 1992; 717 F. Supp. 1428. Of course, the mere notion of using animation to indicate the selection of an icon could not be protected in any event, as this merges with the idea of using icons, and is standard treatment in computer interfaces.

The expression associated with this item differs greatly in the works at suit. In Macintosh Finder and in Lisa, icon selection is indicated by inverse video, which is unprotectible. See discussion of G19, supra. In Windows 1.0, a box around the icon indicated selection. In Windows 2.03, this was accomplished by showing the title of the icon. Windows 3.0 highlights the title to indicate selection. This is neither virtually identical, nor even substantially similar to the Apple expression, and it is beyond reason that a jury could find otherwise.

X2(iii) When an application icon is "opened," the display changes to show a window running the application program, creating the appearance that the icon is transformed into the window;

X2(iv) When a group icon is "opened," the display changes to show a window displaying other icons, creating

the appearance that the icon is transformed into the window;

X2(v) When a document icon is "opened," the display changes to show a window displaying the contents of the document, creating the appearance that the icon is transformed into the window;

These three items merely restate licensed item G9, 717 F. Supp. 1428; and unprotectible items G25, G30, and G31. There is no separable artistic expression associated with these items, as the icons in Windows 3.0's Program Manager do not change their appearance when a window is opened. Thus, these items cannot be the basis for copyright infringement.

X2(vi) When a window is "closed," the display changes to show the icon, creating the illusion that the window collapsed into the icon;

This is duplicative of G3, an item which is licensed. 717 F. Supp. 1428. Further, there is no change in the appearance of the icons in Program Manager when a window is closed. There being no "illusion" of collapsing, this item simply implicates no expression in Windows 3.0.

X2(vii) When the position of the icons is "saved," they are displayed in the same position when the computer is turned off and turned on again; * * *

This is the same as G2, found unoriginal, an unprotectible procedure, and covered by the merger doctrine, supra.

X2(viii) When icons are "cleaned up" (i.e. arranged in rows and columns), they are depicted as moving towards specific points on an invisible grid.

This item, when alleged under the guise of G26, has been found unoriginal, an unprotectible procedure, and the result of merger of idea and expression.

X3 The combination of the above features creates a visual impression that is similar in both the Windows 3.0 Program Manager and the Macintosh audiovisual works.

This is merely the reiteration of Apple's "look and feel" argument, rejected by the court in section IV.

B. *File Manager.*

Y1 Windows 3.0 has a second graphical filing system (called File Manager) that also replaced the text-based filing system of Windows 1.0 and Windows 2.03. The appearance of File Manager is similar to the graphical filing system of the Macintosh audiovisual works.

The use of a graphical filing system is an unprotectible idea, and merges with the idea of employing iconic representation.

Y1(i) In File Manager, an application program, document, or directory (which contains application programs or documents) are [sic] represented by a name and a small, down-sized icon appearing to the left of the name.

The use of down-sized icons is standard treatment in the industry. Microsoft's videotape B shows that at least eight systems, beginning with the 1981 Xerox Star, used down-sized icons in this manner. There is no expression separable from that which necessarily follows from use of down-sized icons, so this feature cannot be the basis of an infringement claim.

Y1(ii) A document icon appears as a page with the upper right-hand corner turned down.

This is but the down-sized version of G12, found unoriginal and subject to merger, supra. Microsoft's videotape B shows that this is common to interfaces, as well. This item is unprotectible.

Y1(iii) A directory icon is shown as a folder icon turned on its side with the tab at the left end.

The lack of originality determination for the full-sized version of the file folder, G11, covers the down-sized icon. Additionally, videotape B shows that use of a down-sized file folder icon is standard in the industry, with at least four systems—Star, Viewpoint, Metaphor, and GeoWorks Ensemble—using icons of file folders with the tab on the top left. This item is not protectible.

Y1(iv) An application icon appears in various forms connoting the type of application program involved.

Apple has not indicated any down-sized application program icons that it believes Microsoft copied from Lisa. Windows 3.0's File Manager uses generic rectangular icons with a narrow strip across the top to represent its application programs, whereas the Lisa used miniature versions of its full-sized application program icons. There is no triable issue of similarity on this item, for the down-sized icons used in the two programs are altogether different. This item cannot be the basis for a finding of similarity between the works.

Y1(v) This design and arrangement is similar to the graphical filing system of the Macintosh audiovisual works.

This is merely the "look and feel" argument, rejected by the court in section IV, as it pertains particularly to the filing system features.

Y2 In both the Windows 3.0 File Manager and the Macintosh audiovisual works, the use and movement of icons are visually depicted in a similar manner, specifically [Y2(i)-(vii)]

Y2(i) When a down-sized icon is moved around within a window or from one window to another, the movement is depicted through animation showing an outline of the icon following the cursor;

This is really the same as item G4, except that the movement of the down-sized versions of icons are specifically at issue. Accordingly, the merger and scénes á faire determinations of the court on item G4 also hold for Y2(i).

Comparing the changes in the appearance of the down-sized icons, one finds that the expression is not at all similar. When down-sized icons are moved in the Lisa, a *full-sized* outline of the icon moves with the cursor, leaving behind a shaded outline of the down-sized icon. When the down-sized icons are moved in the File Manager, a copy of the down-sized icon with all of its details is moved. There is no change in the appearance of the down-sized icon appearing to the left of the name until the cursor moves the copy into another window, at which point the original

down-sized icon sometimes disappears, depending on the type of file over which the copy is placed.

Thus, the only artistic feature of Lisa's item Y2(i) that can separated from the general idea of showing a moving down-sized icon—choosing to move a full-sized outline while leaving a shaded outline behind—is not present in File Manager. This feature is not similar in the two works, using either a substantial similarity or a virtual identity standard, and a jury could not find otherwise.

Y2(ii) When an icon is "selected," the selection is depicted by a change in the icon's appearance;

In the Lisa, selection of a down-sized icon changes that icon by inverse video and highlights its name with a black rectangle, also changing the name by inverse video. Even were this form of expression employed in File Manager, it could not be the basis for infringement, under the court's lack of originality and scénes á faire determinations concerning item G19. In File Manager, however, there is no change in the appearance of the down-sized icon itself when it is selected. Inside the Directory Tree, a rectangle highlights the icon and the icon's name, the latter being changed by inverse video, the former remaining the same, with just a different background. In a sub-directory, selection is indicated by highlighting all the way across the window, changing all words by inverse video but not affecting the appearance of the icon.[29] The only similarity is in the use of inverse video, which is not protectible. This item cannot be the basis for infringement.

Y2(iii) When an application icon is "opened," the display changes to show a window running the application program, creating the appearance that the icon is transformed into the window;

Y2(iv) When a document icon is "opened," the display changes to show a window displaying the contents

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[29] The version of Macintosh Finder at suit does not use down-sized icons, and indicates selection when in a non-iconic "View" mode by inverse video of the entire line of information.

of the document, creating the appearance that the icon is transformed into the window;

Y2(v) When a directory (folder) icon is "opened," the display changes to show a window displaying the contents of the folder, creating the appearance that the icon is transformed into the window;

The discussion of items X2(iii)-(v), supra, applies to items Y2(iii)-(v). In File Manager, there is no change in the appearance of the opened icon, and thus no "appearance that the icon is transformed into the window." These items fail to state grounds for an infringement determination.

Y2(vi) When a directory (folder) icon is "opened," the contents may be displayed in a variety of ways, such as "by name," "by type," "by size," and "by date." Information is displayed in columns (viewing from left to right) with the icon displayed, the name, the size of the folder, the date of last modification and the time of last modification; * * *

This is duplicative of licensed item I11, 759 F. Supp. at 1452, except in the use of down-sized icons. Down-sized icons are an unoriginal, standard feature, see discussion of item Y1(i), supra, and their use with item I11 is subject to the merger doctrine, inseparable from the idea of employing icons to facilitate the organization of information stored in the computer's memory. There is no separable artistic expression involved other than the design of the icons, which is covered by other items. Item Y2(vi) cannot support an infringement claim.

Y2(vii) When all the icons in a window are "selected," the selection is depicted by a change in the appearance of all of the icons.

This item merely combines the unprotectible idea of I9 with item Y2(ii), and accordingly cannot be the grounds for infringement.

Y3 The combination of the above features creates a visual impression that is similar in both Windows 3.0 File Manager and the Macintosh audiovisual works.

This restatement of Y1(v) is similarly irrelevant for the purpose of proving infringement.

C. *Fonts, Colors, and Miscellaneous.*

Z1 Both Windows 1.0 and Windows 2.03 showed window and menu titles and text within dialog boxes in monospace fonts. Windows 3.0 adopts proportionally spaced fonts, which is what is used in the Macintosh audiovisual works. This change affects the appearance of window title bars (and thus windows), menus and dialog boxes.

There are only two non-random ways to space fonts: they can be monospaced, or proportionally-spaced. Apple cannot appropriate one of these rare ideas for its exclusive use, nor could such an idea be protectible. Further, the use of proportionally-spaced fonts is common to user interfaces, see videotape B. Microsoft does not even use the same font as Apple, see Foley Suppl Decl ¶ 29. The type of font-spacing used in a user interface cannot be the grounds for copyright infringement.

Z2 Windows 3.0 makes greater use of muted tones (such as black, white, and gray) than Windows 2.03, more similar in appearance to the black, white, and gray tones of the Macintosh. The color change affects fill patterns and the animation used to indicate the selection of menu commands, icons, and other features.

This is an incredible alleged similarity. The Apple works at suit were designed for black-and-white monitors, and can only use the so-called "muted tones" black, white, and gray. The use of colors in Microsoft's Windows 3.0 simply cannot be a similarity to the lack of color in the Apple works.

D. *Summary.*

Not one of the identifiable alleged "additional similarities" comes close to being an identical copy of the corresponding features in the Apple works. Since each and every one of them is subject to at least one limiting doctrine, not one of these items can by itself be the basis of an

infringement determination. See *Data East*, 862 F.2d at 209. Microsoft's motion as to these items is GRANTED.

VII.

The parties are directed to be available for a telephone conference to be scheduled by the court for the week of August 10, 1992, to discuss an efficient means of resolving any remaining undecided issues raised by pending motions. This includes, but is not limited to, similarities between the remaining expression in the works at bar, as summarized in part V, sub-part F.

SO ORDERED.

APPLE COMPUTER, INC., a California corporation,
Plaintiff,
v.
MICROSOFT CORPORATION, a Delaware corporation, and HEWLETT-PACKARD COMPANY, a California corporation, Defendants.

No. C-88-20149-VRW

United States District Court,
N.D. California

April 14, 1993

ORDER ESTABLISHING HEARING ON SUMMARY JUDGMENT MOTIONS, PRETRIAL CONFERENCE AND TRIAL

WALKER, District Judge:

In accordance with the directives of the August 10, 1992 telephone conference call between the parties and the court, as memorialized in the August 12, 1992 order, plaintiff Apple Computer, Inc. ("Apple") and defendants Microsoft Corporation ("Microsoft") and Hewlett-Packard Company ("HP") identified pending motions that the court did not address in its August 7, 1992 order which require resolution. The parties also requested clarification on a few matters in the August 7 order concerning items G5, G11, G24 and H3. This order first clarifies any errors or inconsistencies in its August 7 ruling, then addresses the remaining issues requiring resolution.

I.

Having reviewed the arguments of counsel presented in their briefs, the court hereby **CLARIFIES** its August 7th order as follows.

G5 The design and layout of icons in Macintosh includes display of icons on the screen background behind any open windows.

Item G5 is unprotectible under merger and scénes á faire and should, therefore, be excluded from the list of elements on 63:3 of the August 7 order.

G11 The design and layout in Macintosh presents an icon image shaped like a file folder to indicate objects of type "directory."

Item G11 should be included on page 63 in the list of items as to which the court granted HP's motion on originality.

G24 Macintosh design animation presents an icon in a folder when the icon is moved on top of the folder icon.

There is no remaining issue regarding item G24 because, although the court placed item G24 among the items that may be protected against virtually identical copying, the court also found that the expression Apple now associates with item G24 is not present in NewWave.

H3 The design and layout of Macintosh presents the name "Trash" beneath the special discard folder. The name "Waste Basket" is presented in Lisa. NewWave displays the name "Waste Basket" beneath the special discard folder.

Item H3 is not subject to the merger or indispensable expression doctrines and should, therefore, be omitted from 63:19 of the court's August 7 order.

II.

The principal outstanding issue is whether a jury could reasonably conclude that there is substantial similarity of unlicensed, protected expression between any of Apple's works and either Windows 2.03 or Windows 3.0, or between any of Apple's works and HP's Newwave.

This requires consideration of three sub-issues:

(1) Is there any unlicensed, artistic expression associated with items A1, D1 or G4[1] that has any equivalent to Microsoft's works or HP's works? (Any unlicensed, artistic expression associated with items A1, D1, or G4 would have to be virtually identical to equivalent expressions in Windows 2.03 and 3.0 and NewWave.)

(2) Is there any unlicensed artistic expression associated with items G13, G28, G29, G33, H2 and J10[2] in HP's NewWave that has any equivalent to Apple's works? (Any unlicensed, artistic expression associated with items G28, G29, G33 and H2 would have to be substantially similar to equivalent expressions in NewWave. Any unlicensed, artistic expression associated with items G13 and J10 would have to be virtually identical to equivalent expressions in NewWave.)

(3) Comparing each of Apple's works in suit as a whole to Windows 2.03, Windows 3.0 and NewWave, is there any similarity other than that which necessarily follows from the use of licensed visual displays or unprotectible material?

In determining the similarity of the works as a whole, the trier of fact must apply the virtual identity standard. The works as a whole in this case consist of a compilation of many elements, most of which the court found unprotectible, some of which the court found protectible under the substantial similarity standard and some of which the court found protectible under the virtual identity standard. Despite the different levels of protection afforded to the individual elements, the compilation as a whole is protected

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[1] The court omits item G5 from this list because item G5 is unprotectible under the merger and scénes á faire doctrines.

[2] The court omits item G24 from this list since no issue remains regarding item G24 after the August 7 ruling and the court's clarification of its August 7 ruling.

under the virtual identity standard. As the Ninth Circuit has explained:

> [C]ompilations that consist largely of uncopyrightable elements receive only limited protection. As with factual compilations, copyright infringement of compilations consisting largely of uncopyrightable elements should not be found in the absence of "bodily appropriation of expression."

Harper House, Inc. v Thomas Nelson, Inc., 889 F2d 197, 205 (9th Cir 1989). Bodily appropriation occurs only if there is "copying or unauthorized use of substantially the entire item." Id.

Common sense supports this conclusion. The fact that the work as a whole may be composed of a few individual elements protectible under the substantial similarity standard should not imply that the substantial similarity standard applies to the work as a whole. Here, the individual elements protectible under the substantial similarity standard constitute such a small and isolated part of the entire work that substantial similarity should not engulf the much larger number of unprotectible items by providing the appropriate standard for the entire work.

It tentatively appears that the three sub-issues enumerated above involve questions of fact, not answerable as a matter of law by the court. In order to bring this litigation to a conclusion, the court establishes the pretrial and trial schedule set forth herein and sets a further hearing on the pending FRCP 56 motions directed to the issues referred to in this section above. This hearing shall be conducted on May 5, 1993, at 2:00 p.m. in Courtroom 15.

III.

The court will also conduct a pretrial conference on June 2, 1993 at 2:00 p.m. in Courtroom 15. This conference shall be attended by counsel who will try the case. The following matters shall be accomplished no later than May 24, 1993:

a. Trial memoranda. Each party shall serve all others a trial memorandum which shall briefly state the party's contentions, the relevant facts expected to be proved at trial,

and the law on the issues material to the decision. LR 235-8(a).

b. Jury cases. On issues to be tried to a jury, each party shall serve all others proposed jury instructions on all substantive issues and on any other points not covered by the court's standard instructions, which may be found in the Ninth Circuit Manual of Model Jury Instructions. Instructions shall be brief, clear, written in plain English, free of argument, and shall be organized in logical fashion so as to aid jury comprehension. Standard or form instructions, if used, must be revised to address the particular facts and issues of this case. LR 245-3.

c. Non-jury cases. On non-jury fact issues (if any), each party shall serve all others proposed findings of fact on all material issues. Findings shall be brief, clear, written in plain English and free of pejorative language, conclusions and argument. LR 235-8(b)(ii).

d. Exhibits. Each party shall serve all others one set of all exhibits, charts, schedules, summaries and diagrams and other similar documentary materials to be used at the trial, together with a complete list of all such exhibits (in the form attached). Voluminous exhibits shall be redacted by elimination of irrelevant portions or use of summaries. FRE 1006. Each item shall be premarked using the form of mark attached; generally, exhibits of a plaintiff shall be marked by numbers, exhibits of a defendant by letters. LR 235(8)(d). If there is more than one party on a side, each party's exhibits shall be designated to indicate the party on whose behalf the exhibit is offered.

No exhibits, including damage exhibits, which have not been provided as required by this paragraph will be received at trial.

e. Witnesses. Each party shall serve all others a statement identifying all persons who the party may call as witnesses and summarizing their testimony. No witnesses not included in the statement will be permitted to testify at trial and the testimony of each witness will be limited to the matter set forth in the statement.

In jury cases, unless otherwise ordered, each party shall serve all others a photograph of each witness whose testimony the party expects to offer together with the summary of the witness's proposed testimony and a copy of each writing, photograph or recording the witness is expected to propound.

In non-jury cases, unless otherwise ordered, the statement of testimony shall be used in lieu of direct testimony for each witness under that party's control (i.e., who will appear without subpoena). (A memorandum describing this procedure may be obtained from the courtroom deputy.) Each statement shall be marked as an exhibit and be in form suitable to be received into evidence.

f. Designation of discovery excerpts. Each party expecting to use discovery excerpts as part of its case in chief shall serve and lodge with the court a statement identifying (1) by witness and page and line, all deposition testimony and (2) by number and filing date, all interrogatory answers and requests for admission to be used as part of its direct case. Each interrogatory answer intended to be offered as an exhibit shall be copied separately and marked as an exhibit. LR 235-8(c). The original of any deposition to be used at trial must be filed prior to trial.

g. No other pretrial papers, including a pretrial statement (LR 235-7), are required without further order of the court.

The following matters shall be accomplished no later than May 27, 1993:

a. Objections to evidence. Each party anticipating making an objection to any testimony or exhibits expected to be offered, or wishing to make a motion in limine, shall file and serve a statement briefly identifying each item objected to and the ground for the objection. LR 235-9.

b. Jury voir dire and verdict forms. Each party shall submit proposed questions for jury voir dire and a proposed form of verdict. LR 235-8(b)(i); 245-2.

Any party wishing to arrange a settlement conference before another judge or magistrate judge may do so by

contacting the courtroom deputy. LR 240-1. Any party who appears at a settlement conference before a judge or magistrate of this court or an early neutral evaluator appointed by the court shall have authority to settle the action and shall file a writing signed by that person under penalty of perjury stating that he possessed such authority.

Each document filed or lodged with the court must be accompanied by a copy for use in the judge's chambers. In addition, one copy of the witness and exhibit list should be provided to the court reporter.

If transcripts will be requested during or immediately after the trial, arrangements must be made with the court reporter at least one week before trial commences.

Failure to comply with this order is cause for sanctions under FRCP 16(f).

Trial before the jury will begin on June 28, 1993, at 9:30 a.m. in Courtroom 15. Time allocated for trial: 3 weeks. Opening statements are limited to 30 minutes; closing arguments to 1 hour.

In complying with the foregoing, bear always in mind that the purpose of these guidelines is to assist you in the just, speedy and inexpensive determination of the action. The court will welcome agreed upon modifications if they foster these objectives.

IT IS SO ORDERED.

APPLE COMPUTER, INC., Plaintiff,
v.
MICROSOFT CORPORATION
and HEWLETT-PACKARD COMPANY, Defendants.

No. C-88-20149-VRW

United States District Court,
N.D. California

May 18, 1993

ORDER ADDRESSING MOTIONS FOR RECONSIDERATION FOR SUMMARY JUDGMENT FOR LACK OF SUBSTANTIAL SIMILARITY AND FOR CONTRIBUTORY INFRINGEMENT

WALKER, District Judge:

On May 5, 1993, at 2:00 p.m., the court conducted a hearing to address the following issues:

(1) Hewlett-Packard Company's ("HP") and Microsoft Corporation's ("Microsoft") motions for summary judgment for lack of substantial similarity;
(2) Apple Computer, Inc.'s ("Apple") motion to reconsider the court's April 14, 1993, ruling directing application of the virtual identity standard in determining the similarity of defendants' works as a whole;
(3) Microsoft's motion for summary judgment on Apple's contributory infringement claim; and
(4) Apple's claim that HP cannot rely on the November 22, 1985 license agreement ("1985 Agreement") as a defense to Apple's infringement claim.

Shortly before the May 5 hearing, the court issued tentative rulings on each of the foregoing motions and invited the parties to direct their comments accordingly. Having considered the extensive and capable oral arguments

of counsel and having reviewed the papers, declarations and exhibits submitted, the court hereby: (1) GRANTS in part and DENIES in part Microsoft's motion for summary judgment for lack of substantial similarity; (2) GRANTS in part and DENIES in part HP's motion for summary judgment for lack of substantial similarity; (3) DENIES Apple's motion for reconsideration; (4) DENIES Microsoft's motion for summary judgment on Apple's contributory infringement claim; and (5) DENIES Apple's motion regarding HP's lack of a sublicense under the 1985 Agreement.

In addition, HP requested the court to rule on its Motion For Summary Judgment That It Is Not Jointly And Severally Liable With Microsoft and its Motion for Summary Judgment On The Literary And Application Program Works In Suit. Microsoft also urged the court to rule on its Motion For Partial Summary Judgment Dismissing Apple's Claims Against Windows 2.03 and 3.0 Based On Certain Copyrights before the commencement of trial. Having reviewed the papers submitted, the court hereby DENIES HP's first motion, GRANTS HP's second motion, and GRANTS Microsoft's motion dismissing Apple's claims against Windows based on certain copyrights.

I.

To prevail on its claim of copyright infringement, Apple must ultimately prove both ownership of a valid copyright and copying of protected expression by defendants. Copying may be inferred from (1) access to the copyrighted work by defendants and (2) substantial similarity of both ideas and expression between the copyrighted work and the allegedly infringing work. *Data East USA, Inc. v. Epyx, Inc.*, 862 F.2d 204, 206 (9th Cir. 1988).

As articulated in *Apple Computer, Inc. v. Microsoft Corp.*, 799 F. Supp. 1006 (N.D. Cal. 1992) (hereinafter "August 7 order"), the Ninth Circuit employs a two-part analysis for determining substantial similarity: extrinsic and intrinsic tests. The extrinsic test is an objective one to determine whether there is substantial similarity in the ideas; it depends upon specific criteria which can be listed

and analyzed. Analytic dissection is appropriate. *Sid & Marty Krofft Television Productions, Inc. v. McDonald's Corp.*, 562 F.2d 1157, 1164 (9th Cir. 1977); *Shaw v. Lindheim*, 919 F.2d 1353, 1357 (9th Cir. 1990). The intrinsic test is a subjective one to determine whether there is substantial similarity in expression; it depends on the response of the ordinary reasonable person. *Krofft*, 562 F.2d at 1164. Infringement can only be found if each of the two parts is satisfied. *Id.; Olson v. National Broadcasting Co., Inc.*, 855 F.2d 1446, 1449 (9th Cir. 1988); *Frybarger v. International Business Machines Corp.*, 812 F.2d 525, 529 (9th Cir. 1987).

In the present case, the parties do not dispute Apple's ownership of valid copyrights, and defendants clearly had access to Apple's copyrighted works. The only remaining issue is whether defendants' works are substantially similar in both ideas and expression to warrant a finding of infringement.

Here, the court has already completed the extrinsic analysis and summarized its results in the August 7 order. In that order, the court determined that the vast majority of the allegedly similar items were unprotectible due to merger, scénes á faire, functionality and unoriginality. Of the approximately one-hundred fifty alleged similarities, the court found that only five items—A1, D1, G4, G13 and J10—could possibly be associated with unlicensed artistic expression to be compared under the "virtually identical" standard in the course of intrinsic analysis. *Apple*, 799 F. Supp. at 1041-42. The court also conclude that only items G28, G29, G33 and H2 could be associated with unlicensed artistic expression to be judged under the "substantial similarity" standard during the intrinsic analysis phase. *Id.*

After the court issued the August 7 order, both HP and Microsoft moved for summary judgment for lack of substantial similarity on the remaining elements. Microsoft moved for summary judgment as to items A1, D1 and G4. HP moved for summary judgment as to items A1, D1, G4, G13, J10, G28, G29, G33 and H2. Section II presents the court's rulings on each of these remaining items.

II.

A1 The design and layout in Macintosh includes overlapping rectangular windows in front of a muted background pattern.

The only feature of the overlapping windows in the Macintosh Finder and Lisa Desktop which reflects any separate artistic expression is the drop shadow that appears at the right and lower edges of the overlapping windows in those works. As stated in the August 7 order, this item is to be judged on a virtually identical standard. Yet, no version of HP's NewWave nor any version of Microsoft's Windows uses a drop shadow on its windows. Therefore, item A1 in both NewWave and Windows is not virtually identical to item A1 in Macintosh or Lisa.

D1 Macintosh design animation drags a gray outline of the window along with the cursor when the mouse is pressed on a window's title bar.

Applying the virtual identity standard as noted by the August 7 order, the court finds that item D1 in all versions of Microsoft's Windows and all versions of HP's NewWave is not virtually identical to item D1 in Apple's works. Apple's works depict a moving window with a thin (single-pixel wide), dotted, gray outline. In contrast, the outlines in each version of the Microsoft and HP works are solid, contrasting colored and of variable width, capable of increasing or decreasing thickness (up to several-pixel wide).

Furthermore, the court previously ruled that the use of an outline to indicate a moving window is not protectible, and Apple has pointed to no separate artistic expression beyond the outline. Accordingly, HP's and Microsoft's motions for lack of similarity as to item D1 are GRANTED.

G4 Macintosh design animation moves an icon to any part of the screen by dragging it along with the cursor when the user presses the mouse on the icon. Windows 2.03 and NewWave (within the NewWave Office windows) also present the same animation design, appearance and style.

When an icon is moved in Macintosh Finder, the icon is represented by a thin (single-pixel) outline that

approximates the shape of the icon and its title. The shape of the outline varies with the length of the icon title and generally resembles an inverted "T". While the outline moves about with the cursor, the icon itself is shown at its original position in inverse video. In Lisa Desktop, a moving icon is shown by an outline in the shape of the icon that is dragged with the cursor. At its original location the icon is whited-out while the title remains in inverse video.

Each version of NewWave uses visual displays that are markedly different when an icon is moved. The moving icon is represented by a set of thick (several-pixel wide) dark brackets that are the same size and shape regardless of the shape of the icon and the length of its name. At its original position, the icon is grayed-out. These displays are not virtually identical to the corresponding displays of item G4 in Apple's works.

Similarly, each version of Microsoft's Windows employs methods of depicting a moving icon that differ significantly from those used in Macintosh and Lisa. For example, in Windows 3.0 and 2.03, the moving icon is represented not by an outline or square brackets but by a complete icon with all its details. Also, while the user moves the icon to a new position, nothing remains at the original position, not even an inverse video image or a whited-out shadow. Accordingly, the court GRANTS HP's and Microsoft's motions for summary judgment for lack of virtual identity as to item G4.

G13 The design and layout in Macintosh presents different images within the outline of a generic page icon to indicate objects of different non-directory type.

In its August 7 order, the court held that the actual depiction of the images in the page icons can be protectible. Apple has not, however, identified any particular icon images in any version of NewWave that Apple contends is similar to any particular icon images in the Macintosh or Lisa works. Each image within a page icon in the three versions of NewWave is different from those images contained in Apple's works. Notably, NewWave 3.0 uses color and perspective. Although images in the page icons of

NewWave 1.0 and NewWave 1.0 Developer's Release more closely resemble those pictures in Apple's works, many of these similarities arise out of the need for the picture on the icon's face to reveal the contents of the folder or the functionality of the program. For example, a folder which contains a bar chart should normally depict a bar chart on the face of the icon. In no instance, however, are any such images in any version of NewWave virtually identical to the images used within Macintosh or Lisa page icons. Accordingly, HP's motion for lack of virtual identity is GRANTED as to item G13.

J10 The design and layout in Macintosh attributes dialog presents the object's icon, name, type, creation date, modification date, size, and user-specified comment.

The court's August 7 ruling held that the attributes dialog box[1] is not protectible except to the extent that it contains identifiable artwork or a unique arrangement, and in the latter case receives protection only against virtually identical copying. The Macintosh Finder "Get Info" box contains no identifiable artwork, and the arrangement of the NewWave "Attributes" dialog box is not virtually identical.

In NewWave 1.0 and 3.0, the dialog box includes a scroll bar in the comments area; "OK", "Cancel", and "Help" buttons; an editing field for the icon name; and creator and address information. Macintosh Finder's "Get Info" contains none of these features.

The "Attributes" dialog box in NewWave Developer's Release features the icon on the left and provides an edit field for the icon title, whereas in Macintosh Finder the icon is on the right and its title cannot be edited. Also, like NewWave 1.0 and 3.0, NewWave Developer's Release provides a scroll bar in the comment area; "Done", "Cancel", and "Help" buttons; and identification of the creator and last

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[1] An attributes dialog box provides the user with certain basic information about a document or a directory, such as name of the document or directory, date created, date modified, size, type and any special comments from the user.

modifier of the document. The Macintosh Finder provides none of these features. Thus, each version of NewWave has an attributes dialog box that presents different information in a different arrangement in comparison to the attributes dialog box in Macintosh Finder. Lisa Desktop does not have an attributes dialog box. Accordingly, the court finds no virtual identity between Apple's works and HP's works in the expressions corresponding to item J10 and GRANTS HP's motion.

G28 Macintosh design animation displays a rapid sequence of expanding rectangles beginning at the icon's position and ending at the window's position when an icon is opened into a window.

G29 Macintosh design animation displays a rapid sequence of expanding [sic, contracting] rectangles beginning at the window's position and ending at the icon's position when a window is closed into an icon.

HP draws the court's attention to several differences between the "zooming rectangles" in NewWave and those in Macintosh Finder and Lisa Desktop. Most notably, Macintosh Finder uses rectangles drawn with small, thin (single-pixel wide), black lines and employs an effect characterized by Apple as a "curve ball"[2] effect when opening an icon or closing a window. Lisa Desktop also utilizes thin (single-pixel), black rectangles for its zooming rectangles.

In contrast, HP notes that its NewWave 1.0 and 3.0 employ a set of thick (several-pixel wide) corner brackets, not rectangles, that expand to the final window position. Unlike any of Apple's works, each corner bracket in NewWave appears in a color (often times blue, red or gray) that contrasts with the background displays that it passes over, and no curve-ball effect is used. When an icon is opened in NewWave Developer's Release, HP claims that a

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[2] The "curve ball" effect describes a path traversed by the zooming rectangular windows similar to that traversed by a curve ball pitch in baseball.

set of thick (several-pixel wide) rectangles expands to the final window position, again using contrasting colors but no curve ball effect.

The court finds that the minor variations that HP point to, such as the use of a "curve-ball" effect, brackets instead of solid lines, and contrasting and multiple colors, are likely to be overlooked or dismissed as inconsequential by the average user. Opening or closing a window takes only a fraction of a second. As such, it is difficult to discern the differences noted by HP, especially the absence of the "curve-ball" effect in HP's products. Therefore, the court cannot decide as a matter of law that no reasonable juror would find items G28 and G29 substantially similar. Accordingly, HP's motions for summary judgment for lack of substantial similarity as to items G28 and G29 are DENIED.

G33 Macintosh design animation indicates that a folder icon has been opened into a window by displaying the icon as dimmed.

Applying the substantial similarity test as noted by the August 7 order, the court finds that a jury could reasonably conclude that item G33 in all versions of NewWave is substantially similar to item G33 in Apple's works. To be sure, there are minor differences in the way Apple implements icon dimming and the way HP implements dimming. For example, when an icon is opened into window in Macintosh Finder, the dimming effect replaces the outline of the icon with a dotted area of the same size, eliminating all of the detail that the icon previously featured. The appearance of the icon's title remains unchanged, with dark letters on a white background. Similarly, in Lisa Desktop, the outline and all detail in the icon are removed and the title of the icon is unchanged. In addition, no dimming appears in Lisa Desktop, resulting in an effect much like the whiting-out used in the Xerox 8010 Star Information System.

In contrast, after opening an icon into a window in NewWave 3.0, the outline and details of the icon are still visible, the lettering in the title changes from white to black

and a thin drop shadow appears at the right and bottom edges of the icon.

The similarities, however, between Apple's works and HP's are even more impressive. As in Macintosh Finder, in NewWave 3.0, a distinctive, dotted gray pattern covers the icon to indicate that the icon has been opened. The same distinctive, dotted gray pattern covers the icon in NewWave 1.0 and NewWave Developer's Release. The court recognizes that there are numerous alternatives to "dimming" to indicate an opened icon, including use of color, changes in texture, shading, blinking, a surrounding box or other shape, or three-dimensional pop-up effects, to name a few. See ¶ 17 of the March 30, 1990 Shneiderman Declaration. Notwithstanding these alternatives, HP adopted animation in all three versions of NewWave that a trier of fact could reasonably conclude is substantially similar to Apple's dimming effect. Accordingly, the court DENIES HP's motion for summary judgment for lack of substantial similarity as to item G33.

H2 The design and layout in Macintosh displays the special discard folder as an icon resembling a trash can (as does Lisa).

A simple comparison of the "Waste Basket" icons used in NewWave 3.0 and NewWave 1.0 reveals that each icon is dissimilar from the "Trash" icons used in the Macintosh and Lisa works. The "Trash" icon in Macintosh Finder is a two-dimensional side view of an outdoor alley-style cylindrical garbage can. The depiction includes a set of four vertical lines to simulate a ribbed or fluted surface, and a closed lid with a handle on top. The Lisa Desktop "Waste Basket" icon shows the same view of an alley-style garbage can, also with vertical lines to indicate a ribbed surface, but with an open lid and a handle on the front of the can.

In contrast, the "Waste Basket" icons in NewWave 3.0 and 1.0 are perspective views of an indoor kitchen-style rectangular flip-top container. The NewWave 3.0 and 1.0 icons include a foot pedal and depict the top as partially open. In addition, the NewWave 3.0 icon is displayed in a box that appears to be recessed into the desktop. In short,

the waste basket icons in NewWave 3.0 and 1.0 constitute different artistic expressions from that contained in the trash icons in Macintosh Finder and Lisa Desktop. Thus, item H2 in NewWave 3.0 and 1.0 is not substantially similar to item H2 in any of Apple's works, and HP's motion is GRANTED as to NewWave 3.0 and 1.0.

The same, however, cannot be said of NewWave Developer's Release. Like the garbage icons in the Macintosh and Lisa, the "Waste Basket" icon in NewWave Developer's Release is depicted as an outdoor alley-style cylindrical garbage can with a lid and a handle on the top. Although the garbage can in NewWave Developer's Release does not have vertical lines to indicate a fluted surface or a handle, a trier of fact could reasonably find substantial similarity between it and the garbage icons in Apple's works. Accordingly, HP's motion for lack of substantial similarity is DENIED as to item H2 in NewWave Developer's Release.

A summary of the court's rulings with respect to each item discussed above is provided in attached Table A.

III.

In its tentative ruling dated May 5, 1993, the court proposed submission of the following issues for trial:

(1) Applying the appropriate test to each element, are the remaining unadjudicated elements substantially similar or virtually identical to their equivalents in Apple's works?

(2) If so, does the presence of the elements found to be substantially similar or virtually identical significantly alter the works in suit as a whole?

(3) If the answer to (2) is yes, are the allegedly infringing works, viewed as a whole, substantially similar to the copyrighted work?

If the answer to (2) is no, are the allegedly infringing works, viewed as a whole, virtually identical to the copyrighted work?

A.

In section II above, the court granted summary judgment in Microsoft's favor on each of the remaining protectible elements found in Windows, namely items A1, D1

and G4. See attached Table A. In so doing, the court has determined that Microsoft's Windows consists only of elements that are either unprotectible, licensed, or protectible but lacking sufficient similarity to Apple's works. Even so, Microsoft's Windows may still infringe Apple's works. As noted by the court in *Apple Computer, Inc. v. Microsoft Corp.*, 779 F. Supp. 133, 135-36 (N.D. Cal. 1991), copyright protection may attach to an innovative "melding" of unprotectible features. The Ninth Circuit in *Harper House, Inc. v. Thomas Nelson, Inc.*, 889 F.2d 197, 205 (9th Cir. 1989), held that works consisting largely of uncopyrightable elements are entitled to copyright protection, but receive only limited protection. The court added that infringement should not be found in the absence of "bodily appropriation of expression," and that bodily appropriation occurs only if there is "copying or unauthorized use of substantially the entire item." Id. Hence, because the court has determined that Windows consists only of elements that are either unprotectible, licensed, or protectible but lacking sufficient similarity to Apple's works, the jury must apply the virtual identity standard when comparing the similarities of Microsoft's works as a whole to Apple's.

B.

Although the court found that each remaining protectible element in Windows lacks substantial similarity to any elements in Apple's works, the same may not be true of the protectible elements in NewWave. In HP's case, the court denied HP's motion for summary judgment as to items G28, G29, G33 and H2 in part. Having made the foregoing rulings, the court now finds that it need not submit question (2) above to the jury. Instead, the court concludes, as a matter of law, that the remaining unadjudicated elements (G28, G29, G33 and H2), even if found substantially similar, do not significantly alter the works in suit as a whole. Thus, the answer to question (2) is negative.

In *Computer Associates International, Inc. v. Altai, Inc.*, 982 F.2d 693, 710 (2d Cir. 1992), the Second Circuit stated that after filtering out all unprotectible elements, the court's

substantial similarity inquiry should focus on the remaining "core of protectible expression," and whether defendant copied any aspect of this protected expression, as well as "*the copied portion's relative importance with respect to the plaintiff's overall program.*" (Emphasis added). Similarly, Professor Nimmer states that "[o]nce plaintiff's work has been filtered down to it protectible core, comparing those protected elements against defendant's program poses essentially a value judgment, involving an assessment of the importance of the material that was copied." 3 Melville B. Nimmer and David Nimmer, *Nimmer on Copyright* § 13.03[F] at 13-102 (1992).

In the present case, G28, G29, G33 and H2 do not significantly alter (either quantitatively or qualitatively) the works in suit as a whole. Quantitatively these four elements constitute a small fraction of the total work. The audiovisual works in Macintosh and Lisa are complex works, and Apple originally alleged that approximately one-hundred fifty elements of its works were similar to expression in NewWave. Here, the four possibly infringing elements of NewWave are relatively minor in the context of the entire work.

Professor Nimmer states that "[i]n some cases, the amount copied will be so small as to be *de minimis*, and will not justify a finding of substantial similarity." 3 Melville B. Nimmer and David Nimmer, *Nimmer on Copyright* § 13.03[F] at 13-102 (1992). For example, in *See v. Durang*, 711 F.2d 141, 143 (9th Cir. 1983), the Ninth Circuit, upon conducting an analytical dissection of a play, found that five similarities out of twenty were protectible. The court held that as a matter of law there was no substantial similarity of the works, and affirmed a grant of summary judgment of noninfringement:

> The remaining five similarities are not sufficient to convince any reasonable trier of fact that the [works in suit] are substantially similar.

Id.

Of course, quantitatively insignificant infringement may be substantial if the material is qualitatively important to

plaintiff's work. *Narell v. Freeman*, 872 F2d 907, 913 (9th Cir. 1989). In the present case, however, the remaining four elements also lack qualitative significance to the works in suit.

Items G28 and G29 cover the animation effect achieved by the zooming rectangles every time an icon is opened or a window closed. As mentioned above, it takes only a fraction of a second to open an icon or close a window. Therefore, even if this zooming rectangle effect is important, the whole process is of such short duration that no jury could reasonably conclude that items G28 and G29 are qualitatively significant to the work as a whole. Furthermore, the zooming effect only comes into play when icons are opened or windows closed, which takes up a small percentage of the user's time on the computer.

Item G33 pertains to the dimming of an icon to indicate it has been opened into a window. While a dimmed icon provides useful information to the user, the icons are typically small relative to the entire computer screen. Moreover, when an icon is opened into a window, the newly opened window often covers up the dimmed icon, hiding the dimmed icon from view. No jury could reasonably conclude that the dimmed icon significantly alters the audiovisual works as a whole.

Item H2 covers the trash can icon. While clever, functional and aesthetically pleasing, the trash icon is only one of many such icons displayed on the default screen. Other icons include a "Diagnostic" icon depicted in the form of a wrench, a "Printer" icon shown in the image of a printer, and a "File Drawer" icon illustrated as a filing cabinet drawer full of folders. All of these icons perform some useful function and are depicted in a clever and aesthetically pleasing manner. Thus, because the trash icon is only one of several such icons and because the screen is filled with many other images, the court finds as a matter of law that item H2 does not significantly alter the audiovisual works as a whole.

Of course, the law requires the court to consider the collective impact of these four elements on the works in suit,

not their individual effect. See *Computer Associates*, 982 F.2d at 710, (court's substantial similarity inquiry should focus on the "*core* of protectible expression") (emphasis added). Yet, the collective impact of items G28, G29, G33 and H2 is *de minimis*. Apple itself has never contended that these four isolated similarities are qualitatively significant to Apple's works as a whole. In fact, Apple itself has consistently maintained that it has never based its infringement claims on just a few items of similarity. At a hearing on April 14, 1992, Apple's counsel explained to the court:

> I don't want to end up with this case saying, "Oh, well, all we have to do is change a trash can or change this or that." That isn't what this case is involving. We didn't bring a small case; we brought a case of tremendous significance to the client and to the industry. It's virtually the most important—certainly the most important case I have ever tried—but it's important because of the impact, the importance of this intellectual property asset of Apple's that they created and they owned and the totality of that expression * * *.

Transcript of April 14, 1992 hearing at 38:24-39:9. Apple's counsel also offered the following explanation of its infringement charge, again dismissing the significance of a few individual alleged similarities:

> *We wouldn't complain * * * if somebody takes a graphical user interface and makes use of the overlapping window. We wouldn't complain if somebody wanted to even use a trash can in the right-hand corner* or maybe—obviously we can protect our particular drawing of that * * *, but *we wouldn't probably complain if they took that and several other things* just as closely as * * * Microsoft and Hewlett-Packard did.

Id. at 33:3-11 (emphasis added). As Apple has admitted, the remaining items simply do not significantly alter (either quantitatively or qualitatively) the works in suit. Therefore, the answer to question (2) above is negative, and the virtual identity standard provides the appropriate standard when comparing HP's works as a whole to Apple's.

Apple, of course, objects to the court's application of the virtual identity standard in comparing the works as a whole and moves for reconsideration of the court's April 14, 1993, ruling. Apple contends the works in suit are not "compilations" as defined in 17 U.S.C. § 101, and that the court's reliance on *Harper House* to support an application of the virtual identity standard is misplaced.

The applicability of the virtual identity standard does not, however, depend on whether the work at issue is deemed to be a compilation, but rather on the range of possible expression. As the Ninth Circuit explained in *Landsberg v. Scrabble Crossword Game Players, Inc.*, 736 F.2d 485, 488 (9th Cir. 1984),

> Some ideas can be expressed in myriad ways, while others allow only a narrow range of expression. Fictional works generally fall into the first category * * * . An author wishing to write yet another work using the "boy meets girl" idea can choose from a wide range of materials in composing his or her own expression of the idea. Therefore[,] a new work incorporating that idea need not be a verbatim copy or close paraphrase of an earlier work to infringe that work.
>
> * * * * *
>
> Factual works are different. Subsequent authors wishing to express the ideas contained in a factual work can choose from only a narrow range of expression * * *. Therefore, similarity of expression may have to amount to verbatim reproduction or very close paraphrasing before a factual work will be deemed infringed.

Thus, the critical factor in deciding whether to apply a virtual identity standard is whether the work is capable of only a narrow range of expression, not, as Apple contends, whether the work can be labelled a compilation. Although the works at issue here are not "factual" works *per se*, they are works whose ideas can be expressed in limited ways. *Landsberg* teaches that the virtual identity standard should apply in comparing such works, even if they are not true

compilations. Accordingly, the court DENIES Apple's motion for reconsideration and REAFFIRMS that the jury shall apply a virtual identity standard in comparing the works as a whole.

IV.

A.

Apple alleges that Microsoft is contributorily liable for any infringement by HP, and Microsoft has moved for partial summary judgment on this claim.

Liability for contributory infringement arises when a defendant knowingly induces, causes, or materially contributes to the infringing activity. *Gershwin Publishing Corp. v. Columbia Artists Management,* 443 F.2d 1159 (2d Cir. 1971); *Casella v. Morris,* 820 F.2d 362, 365 (11th Cir. 1987). The participation of the alleged contributory infringer must be "substantial." *Demetriades v. Kaufmann,* 690 F. Supp. 289, 294 (S.D.N.Y. 1988).

Microsoft contends that it did not materially contribute to the development of NewWave, nor did it exercise any control over the content of NewWave or its visual displays. Microsoft further asserts that the agreement it entered into with HP, which permitted HP to obtain master copies of Windows, make minor hardware-specific adjustments and distribute Windows to end users, was no different from Microsoft's standard OEM (Original Equipment Manufacturer) agreement entered into with other OEMs such as IBM, Compaq and Digital Equipment Corporation. In no event, according to Microsoft, did its agreement with HP constitute a special agreement to split the efforts of developing NewWave.

Apple, on the other hand, maintains that Microsoft and HP had entered into a "highly customized" OEM license agreement in which HP and Microsoft agreed to "split [the] efforts of development." Apple further claims that Microsoft assisted HP with its NewWave project by making certain changes and enhancements to Windows at HP's request and that Microsoft continues to assist HP in solving NewWave problems, including bug fixing and "a lot of technical issues"

related to the management of memory and of system resources.

Microsoft replies that it has hundreds of customers from which it can receive requests for bug fixes and technical information. The fact that it responded to such requests from HP, one of its customers, does not evidence any special relationship between the parties. Accordingly, Microsoft urges the court not to rely on such "routine software developer behavior" as evidence that Microsoft substantially contributed to HP's development of NewWave. The court finds, however, that Apple has raised enough questions of material fact concerning the extent and nature of Microsoft's involvement in the development of HP's NewWave and the nature of the OEM agreement between HP and Microsoft to warrant DENIAL of Microsoft's motion for summary judgment on contributory infringement.

B.

HP also moves for summary adjudication that it is not jointly and severally liable with Microsoft. According to Apple, HP should be held jointly and severally liable with Microsoft because: (1) HP and Microsoft collaborated in the development of a routine called WINOLDAP;[3] (2) HP and Microsoft collaborated in the development of a multidocument interface program ("MDI"); and (3) HP suggested to Microsoft that Microsoft develop a program for overlapping windows.

HP contends that although it did provide modification code for the WINOLDAP program, HP's contribution did not affect the graphic user interface of any of the Windows programs. HP also argues MDI was developed entirely by Microsoft without any assistance from HP. Finally, HP claims that it had no involvement in the design or implementation of overlapping windows in the 2.03 and 3.0 versions of Windows, nor did it suggest including overlapping windows to Microsoft.

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[3] WINOLDAP is software that enables a user to run prior generations of application programs with subsequent generations of Windows programs.

Apple, on the other hand, argues just the opposite. According to Apple, (1) HP assisted in the inclusion of enhancements to Windows that added to the infringing nature of Windows; (2) HP encouraged Microsoft to change to overlapping windows and to support the MDI in Windows 2.03; (3) HP developed for Windows 2.03 an application-saving feature adding significant value to the product; and (4) HP assisted in the promotion of Windows through HP's advertising and participation on promotional tours.

Again, the court finds that Apple has raised enough questions of material fact concerning the extent and nature of HP's involvement in the development of Windows and whether HP's contributions, if any, actually affected the graphical user interface of Windows to warrant DENIAL of HP's summary judgment motion.

V.

Apple alleges that HP has no right to rely on the 1985 Agreement between Microsoft and Apple as a defense to copyright infringement because HP admitted in a letter dated August 3, 1992, that "Microsoft did not issue a formal written license to HP specifically sublicensing HP under the 1985 Microsoft/Apple Agreement." See August 3, 1992, letter from Jonathan Marshall.

While it is true that Microsoft issued no "formal written sublicense to HP," nothing in the 1985 Agreement nor in the copyright law requires Microsoft to enter "formal written" licenses of the type Apple seeks to require. See *Nimmer on Copyright* § 10.03[A] ("A nonexclusive license may be granted orally, or may even be implied by conduct."). There is no dispute that Microsoft authorized HP to use Windows visual displays in connection with HP's NewWave products. Furthermore, under its 1985 license agreement with Apple, Microsoft clearly had the right and power to do so.

In any event, Judge Schwarzer has already found HP to be a licensee of Microsoft. See *Apple Computer, Inc. v. Microsoft Corp.*, 717 F. Supp. 1428, 1435 (N.D. Cal. 1989), which held:

> Microsoft and *its licensee HP* are therefore entitled to partial summary judgment on Apple's infringement claim insofar as it is based on the use of Windows 2.03 *and in NewWave* of visual displays in Windows 1.0 and the named application programs. Accordingly, this ruling constitutes a *summary adjudication* that *defendants'* use in Windows 2.03 *and in NewWave* of the visual displays in Windows 1.0 and the named applications programs is protected against Apple's infringement claim by the license provision in the 1985 Agreement.

(Emphasis added).

Thus, Apple's contention is meritless since the facts clearly demonstrate that HP is a licensee of Microsoft, and is therefore entitled to the protection of the 1985 Agreement.

VI.

In addition, Microsoft requests ruling on its Motion for Partial Summary Judgment Dismissing Apple's Claims Against Window 2.03 and 3.0 Based on Certain Copyrights, and HP requests the court to rule on its Motion For Summary Judgment On The Literary And Application Program Works In Suit. These two motions are related. In Microsoft's motion, Microsoft moves to dismiss Apple's claims that Windows 2.03 and 3.0 infringe the audiovisual copyrights of MacPaint, MacDraw, MacProject, Macintosh Finder, LisaDraw and LisaProject. In HP's motion, HP moves to dismiss Apple's claims that NewWave infringes MacPaint, MacDraw, MacProject, LisaDraw and LisaProject.

A.

Apple alleges that Windows 2.03 and 3.0 infringe seven of Apple's separately registered audiovisual works—MacPaint, MacDraw, MacProject, Macintosh Finder, LisaDraw and LisaProject. In its motion, Microsoft seeks to dismiss Apple's claims based on MacPaint, MacDraw, MacProject, Macintosh Finder and LisaDraw on the grounds that: (1) all alleged similarities contained in the works have been determined to be licensed; (2) the remaining alleged similarities are not contained in the works; (3) the work are

derivative works whose copyrights do not extend to the remaining alleged similarities; and (4) the works lack substantial similarity of ideas with Windows 2.03 and 3.0, and so are not infringed. Section 1 below discusses Windows 2.03, while section 2 addresses Windows 3.0.

1.

In Windows 2.03, all of the MacPaint based alleged similarities, sixty in total, have been determined to be licensed. *Apple Computer,* 717 F. Supp. at 1435. Therefore, these visual displays may not form the basis of a copyright infringement claim against Microsoft.

Of the original 189 alleged similarities between Apple's copyrighted works and Windows 2.03, only the following ten remain at issue: A1, A8, B1, B2, D1, D2, D3, G4, G5 and G6. *Apple Computer, Inc. v. Microsoft Corp.*, 717 F. Supp. 1428, 1435 (N.D. Cal. 1989). Apple's designated Rule 30(b)(6) witness, Stephen Capps, has testified that these remaining ten alleged similarities are *not* present in Apple's MacPaint, MacDraw or MacProject applications. Accordingly, Apple may not base its claims against Windows 2.03 upon these three works.

Apple disagrees with Microsoft's interpretation of Capps' testimony. According to Apple, Capps was asked a much narrower question, namely whether various visual displays relating to overlapping windows and icons appear in the "*content area*" of the MacDraw, MacPaint or MacProject windows. The "content area is defined as the area inside the title bar and scroll bars of a window. Apple objects to defendant artificially restricting Capps' attention to the "content area" alone. Apple argues that the works in suit are audiovisual works that consist of and incorporate all visual displays that appear on the screen when the programs are running, not just that which lies within the title bar and scroll bars.

The court finds, however, that the application programs (MacDraw, MacPaint, MacProject, etc.) are responsible only for what appears in the "content area." Other components of Apple's system, namely the System Software, generate the rest of the visual displays, such as the scroll bars and title

bar which surround the "content area." Since all of the alleged similarities lie outside the "content area" and do not arise out of the application programs, the copyrighted application programs MacDraw, MacPaint and MacProject cannot be infringed.

Any other conclusion would make no sense. If Apple is permitted to pursue an infringement claim based on application programs that merely run under Lisa Desktop or Macintosh Finder, without requiring that the programs provide any of the allegedly similar displays, then there is no limit to the number of copyrights that Apple could assert. Under Apple's rationale, any application, whether a word processor, a spreadsheet, or even a computer game, could be the basis of an infringement claim merely because it runs within a window system, which has similarities to Apple's works. Therefore, Apple may not base its claim against Windows 2.03 on MacPaint, MacDraw or MacProject.

Furthermore, the ten remaining alleged similarities from Windows 2.03 are not covered by the Macintosh Finder copyrights either. Apple's Macintosh Finder is an acknowledged derivative work of Lisa Desktop, and is so registered. See Apple's Copyright Registration No. PA 336 105, Section 6(a) (Exhibit B). Section 103(b) of title 17 of the United States Code clearly provides that copyrights in a derivative work are limited to the "new material" added to the derivative work. Preexisting material in a derivative work which is carried forward from a prior work is only protected under the copyrights for the prior work. Id. Since the ten remaining allegedly infringing visual displays from Apple's 2.03 list are found in Lisa Desktop, they are carried forward from Lisa Desktop and covered by the Lisa Desktop copyrights. If Apple wishes to maintain a claim against Windows 2.03 based on these ten similarities, it must do so under the Lisa Desktop copyrights.

Apple responds that as creator and registered owner of all material, Apple is entitled to sue on the original Lisa works as well as the later Macintosh derivative works. Apple claims that there is nothing in the Copyright Act or the case law that would compel Apple to sue only on its

original copyrights or to limit its protection of its derivative copyrights.

The case law clearly provides, however, that copyrights in derivative works protect only the incremental addition made to the preexisting material. *Silverman v. CBS, Inc.*, 870 F.2d 40, 49-50 (2d Cir. 1989). Unless an alleged similarity arises from the new material in a derivative work, the copyright in the derivative work is not at issue, and there is no basis to include it in suit. The court should therefore dismiss the claims against Windows 2.03 based on the Macintosh Finder since the copyrights in Macintosh Finder do not extend to these ten alleged similarities.

Finally, there is no substantial similarity of ideas between Windows 2.03 and MacDraw, MacProject, LisaDraw and LisaProject. To establish a *prima facie* case of copyright infringement, plaintiff must prove that the works at issue are substantially similar in both ideas ("extrinsic test") and expression ("intrinsic test"). *Sid & Marty Krofft*, 562 F.2d at 1164. No jury could reasonably conclude that there is substantial similarity between Windows 2.03 and MacDraw, MacProject, LisaDraw and LisaProject.

The Windows 2.03 product includes a graphical operating environment and several application programs, such as Calendar (a basic calendar application), Terminal (a telecommunications program) and Reversi (a simple game program). In contrast, MacProject and LisaProject are application programs which provide scheduling and flow charting capabilities, and MacDraw and LisaDraw offer drawing capabilities to users. However, the functionality, idea and purpose behind the MacDraw, MacProject, LisaDraw and LisaProject application programs could not be more different from any of the programs found in Windows 2.03.

Apple responds that the underlying idea of MacDraw and LisaDraw is to "present, in the context of a graphics program to create charts and diagrams, a graphical user interface based on a desktop metaphor." Similarly, the idea of MacProject and LisaProject is to "present, in the context of a graphics application to create schedules and timeline

related charts, a graphical user interface based on a desktop metaphor." Apple contends that even though these works provide specific functions as applications programs, they "more importantly * * * reflect the graphical user interface of the Lisa and Macintosh computers."

Apple's argument that Windows's underlying idea, which is to provide a graphical user interface based on a desktop metaphor, and MacDraw's underlying idea, which is to provide drawing capabilities to the user, are substantially similar is ridiculous. The same can be said about MacProject, LisaDraw and LisaProject. As aptly noted by HP, "Apple's ongoing struggle to define *one idea* of sufficient breadth to encompass *all of the works* in suit reveals how illogical it is to maintain a claim for infringement of the application program works."

For the foregoing reasons, the court GRANTS Microsoft's motion for summary judgment based on MacPaint, MacDraw, MacProject, Macintosh Finder and LisaDraw as to Windows 2.03.

2.

The nine MacPaint visual displays asserted against Windows 3.0 are licensed. Accordingly, they provide no basis for a copyright claim against Windows 3.0.

Apple has asserted the same ten remaining alleged similarities of Windows 2.03 against Windows 3.0, namely items A1, A8, B1, B2, D1, D2, D3, G4, G5 and G6. As in the case with Windows 2.03, Apple's designated witness, Mr. Capps, testified that these remaining ten alleged similarities in Windows 3.0 are *not* present in Apple's MacPaint, MacDraw or MacProject applications. In addition, the twenty-six visual displays now asserted against Windows 3.0, namely A2, A4, A5, A9, E1, F3, F15, G7, J1, J6, N3, O4, P4, P5, P22, P33, P37, P41, P52, P56, P60, R1, R2, R3, T5 and W3, are licensed features. To the extent that they are present in MacPaint, MacDraw and MacProject, they may not serve as a basis for Apple's claims against Windows 3.0.

Moreover, Apple has asserted "additional similarities" pertaining to the following aspects of Windows 3.0: (1) Program Manager, (2) File Manager, and (3) Fonts, Colors

and Miscellaneous. First, Apple claims that, like MacPaint, MacDraw and MacProject, Windows 3.0's Program Manager and File Manager are iconic filing systems. Yet, MacPaint, MacDraw and MacProject are not iconic filing systems. Lisa Desktop and Macintosh Finder are Apple's filing programs; hence, Apple may not base its claim against Windows 3.0 upon MacPaint, MacDraw and MacProject. Second, Apple alleges similarities based on proportional spaced fonts and muted colors. Yet, these fonts and colors are found in Lisa Desktop and are, therefore, properly covered under the Lisa Desktop copyrights. For the foregoing reasons, Microsoft is entitled to summary judgment on Apple's claims against Windows 3.0 based on MacPaint, MacDraw and MacProject.

In addition, MacDraw, MacProject and Macintosh Finder are derivative works. To the extent that any of the alleged similarities of Windows 3.0 appear on the screen when MacDraw, MacProject and Macintosh Finder are running, they are carried forward from LisaDraw, LisaProject and Lisa Desktop respectively. Accordingly, these allegedly similar visual displays are covered by LisaDraw, LisaProject and Lisa Desktop copyrights.

Lastly, MacDraw, MacProject, LisaDraw and LisaProject lack substantial similarity of ideas with Windows 3.0. As noted above, Windows presents a graphic operating environment and includes a few application programs. MacDraw and LisaDraw are applications which provide drawing capabilities to users, and MacProject and LisaProject provide scheduling and flow charting capabilities. These programs lack similarity of ideas.

Accordingly, the court finds that elimination of Apple's claims based on MacPaint, MacDraw, MacProject, Macintosh Finder, LisaDraw and LisaProject appropriate, and hereby GRANTS Microsoft's motion for summary judgment on these works. In so doing, the court has not unduly prejudiced Apple because all of its copyright allegations remain intact under its Lisa Desktop claim.

B.

In HP's Motion For Summary Judgment On The Literary And Application Program Works In Suit, HP seeks

dismissal of LisaDraw, MacDraw, MacPaint, LisaProject and MacProject. Having considered the papers submitted, the court hereby GRANTS HP's motion on the following grounds.

First, HP correctly contends that no substantial similarity of ideas exists between NewWave and any of the five application program works—LisaDraw, MacDraw, MacPaint, LisaProject and MacProject. NewWave has no drawing, painting or project scheduling tools. As such, it cannot share those ideas, or be substantially similar in idea, to Apple's application programs.

Second, Apple has stipulated that the vast majority of the alleged similarities appear nowhere in the five application programs. Apple's own Rule 30(b)(6) witness, Mr. Capps, testified that none of the forty-four alleged NewWave similarities[4] appears in the LisaProject, and Apple stipulated that none of these alleged similarities appeared in the other four application programs—LisaDraw, MacDraw, MacPaint and MacProject. Based upon the foregoing, the court finds there can be no infringement of the five application programs.

Third, all of the alleged similarities that are actually displayed are generated by the System Software, not by the application programs. Since LisaDraw, LisaProject, MacDraw, MacPaint and MacProject do not create any of the alleged visual similarities in Apple's list, they cannot be infringed by NewWave.

C.

Finally, HP and Microsoft also urge the court to rule on their motions relating to damages, profits and prejudgment interest before trial. The court DENIES defendants'

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[4] After the court's decision in *Apple Computer, Inc. v. Microsoft, Corp.*, 759 F. Supp. 1444, 1452 (N.D. Cal. 1991), fifty-four items pertaining to NewWave remained: A1, A8, B1, B2, D1-3, G1-2, G4-6, G10-21, G23-33, H1-6, I1-2, I4, I6-11, J8-11. This list consists of the ten items allegedly applicable to NewWave because they are found in Windows 2.03 (A1, A8, B1, B2, D1-3, G4, G5, G6; id at 1449-50) ("the ten Windows items"), and the forty-four items applicable to NewWave alone (G1-2, G10-21, G23-33, H1-6, I1-2, I4, I6-11, J8-11) ("the 44 NewWave items").

requests at this time. Instead, in the interest of judicial economy and convenience, the court hereby BIFURCATES the damages phase of the trial from the liability phase pursuant to FRCP 42(b). See *Ellingson Timber Co. v. Great Northern Railroad Co.*, 424 F.2d 497 (9th Cir. 1970); *Baxter Travenol Laboratories, Inc. v. Le May*, 536 F. Supp. 247 (S.D. Ohio 1982). The court will address defendants' damages motions only if the jury finds liability.

VII.

Additionally, the court notified the parties at the May 5, 1993, hearing that payment of fees and expenses to jurors in civil trials may be suspended before the June 28 trial date. In response, counsel for Apple suggested that Apple, HP and Microsoft share the cost of the jurors' fees and expenses. Under such an arrangement the jurors would not know the source of their compensation and all parties would have to agree to the arrangement. The court asked the parties to investigate the legality and appropriateness of such a plan and to prepare the matter for discussion at the pretrial conference on June 1, 1993, at 2:00 p.m.

Since the May 5 hearing, the court has found two cases which bear on the issue. In *United States v. Branscome*, 682 F.2d 484, 485 (4th Cir. 1982), the court held that selection of volunteers to serve on a grand jury from a pool of prospective jurors who had been randomly selected violated the Jury Selection and Service Act, 28 U.S.C. § 1861-76. The court noted that the selection of volunteers introduced a subjective criterion for grand jury service not authorized by the Act, and violated Congress' intent to ensure random selection throughout the entire selection process. Id.

Similarly, in *United States v. Kennedy*, 548 F.2d 608, 610 (5th Cir. 1977), the court ruled that the trial court's emergency use of volunteer jurors selected from citizens who had just finished a term of jury service violated both the letter and spirit of the Jury Selection and Service Act. Section 1866(f) of title 28 of the United States Code requires random selection of jurors. The court stated that,

> Providing prospective jurors with complete discretion whether or not to serve negates the statutory mandate of random selection.

Id. at 612.

> The court added:
> We need not speculate as to what sort of biases will be reflected in a jury chosen on the basis of its members' willingness to depart from their daily business and serve as jurors. It is enough to recognize that a substantial variable, not contemplated by the Act's few, narrow categories of qualifications, exemptions, and excuses, has confounded the selection process.

Id.

Unlike the jurors in *Branscome* and *Kennedy*, the jurors in this case would not be volunteers. As required by 28 U.S.C. § 1866(f), they would be selected in a random manner from the usual jury pool. Any juror selected would not have the option of declining service unless he or she were unqualified, fell within one of the narrowly drawn exemptions, or provided a legitimate excuse. Thus, it appears to the court that the method of compensating and reimbursing jurors proposed above could be lawful. As a precaution, the court reiterates its earlier directive for the parties to research the issue and to notify the court of their findings.

VIII.

In summary, the court will submit the following questions for the trial which is scheduled to commence on June 28, 1993:

(1) Are items G28, G29 and G33 in all versions of NewWave and H2 in NewWave Developer's Release alone substantially similar to their equivalents in Apple's works?

(2) Are any of HP's works as a whole virtually identical to any of Apple's works?

(3) Are any of Microsoft's works as a whole virtually identical to any of Apple's works?

(4) If any of HP's works infringe any of Apple's works, is Microsoft contributorily liable for any infringement on the part of HP?

(5) If any of Microsoft's works infringe any of Apple's works, is HP jointly and severally liable for any infringement on the part of Microsoft?

IT IS SO ORDERED.

TABLE A:

Macintosh/Lisa

Items	A1	D1	G4	G13	J10	G28	G29	G33	H2
NewWave 3.0	G	G	G	G	G	D	D	D	G
NewWave 1.0	G	G	G	G	G	D	D	D	G
NewWave 1.0 Developer's Release	G	G	G	G	G	D	D	D	D
Windows 3.0	G	G	G						
Windows 2.03	G	G	G						

Key:
D = Deny.
G = Grant.

APPLE COMPUTER, INC., a California corporation,
Plaintiff,
v.
MICROSOFT CORPORATION, a Delaware corporation, and HEWLETT-PACKARD COMPANY, a California corporation, Defendants.

No. C-88-20149-VRW

United States District Court,
N.D. California

June 8, 1993

ORDER GRANTING MOTION FOR SUMMARY JUDGMENT OF NON-INFRINGEMENT

WALKER, District Judge:

On June 1, 1993, Apple Computer, Inc. ("Apple"), Microsoft Corporation ("Microsoft"), and Hewlett-Packard Company ("HP") came before the court to address HP's and Microsoft's motions for summary judgment of noninfringement for lack of virtual identity, and HP's motion for dismissal of Apple's infringement claims based upon the Macintosh Finder copyright.

Microsoft based its motion for summary judgment on its contention that, when considering the works as a whole, no jury could reasonably find virtual identity between Windows 2.03 and 3.0 and Apple's Lisa Desktop. Similarly, HP based its motion on the absence of virtual identity between any version of NewWave and Lisa Desktop. Because Apple has filed a statement of non-opposition, the court need not rule on the merits of the motions and hereby **GRANTS** Microsoft's and HP's motions for noninfringement for lack of virtual identity based upon the non-opposition.

In addition, HP brought a motion to dismiss Apple's infringement claims based upon the Macintosh Finder

copyright. In its May 18, 1993, order, the court dismissed the Macintosh Finder copyright as to Microsoft. The court reasoned that Macintosh Finder is an acknowledged derivative work of Lisa Desktop, and because the remaining items of alleged similarity in Microsoft's works first appeared in Lisa, they are properly covered by the Lisa copyright. HP did not move to dismiss Apple's infringement claims based on the Finder copyright against NewWave; accordingly, the court did not grant such relief. HP now brings the motion, and the court now **GRANTS** HP's motion for noninfringement with respect to Macintosh Finder for the same reasons it granted Microsoft's motion, namely that the remaining alleged similarities in HP's NewWave arise from material originally used in Lisa Desktop.

Finally, the court hereby **MODIFIES** its May 18, 1993 order to insert the words "LisaProject" after "MacProject" at page 25, line 6 and at page 29, line 25.

IT IS SO ORDERED.

II. CONSTITUTIONAL AND STATUTORY PROVISIONS

A. The United States Constitution, Article 1, § 8 provides in pertinent part:

> The Congress shall have power . . .
>
> To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.

B. 17 U.S.C. § 101, in pertinent part, provides:

§ 101. Definitions

As used in this title, the following terms and their variant forms mean the following:

. . . .

"Audiovisual works" are works that consist of ***a series of related images which are intrinsically intended to be shown by the use of machines*** or devices such as projectors, viewers, or electronic equipment, together with accompanying sounds, if any, regardless of the nature of the material objects, such as films or tapes, in which the works are embodied.

. . . .

A "compilation" is a work ***formed by the collection and assembling of preexisting materials or of data*** that are selected, coordinated, or arranged in such a way that the resulting work as a whole constitutes an original work of authorship. The term "compilation" includes collective works.

"Copies" are material objects, other than phonorecords, in which a work is fixed by any method now known or later developed, and from which the work can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device. The term "copies" includes the material object, other than a phonorecord, in which the work is first fixed.

. . . .

A "derivative work" is a work based upon one or more preexisting works, such as a translation, musical arrangement, dramatization, fictionalization, motion picture version, sound recording, art reproduction, abridgment, condensation, or any other form in which a work may be recast, transformed, or adapted. A work consisting of editorial revisions, annotations, elaborations, or other modifications which, as a whole, represent an original work of authorship, is a "derivative work".

. . . .

To "display" a work means to show a copy of it, either directly or by means of a film, slide, television image, or any other device or process or, in the case of a motion picture or other audiovisual work, to show individual images nonsequentially.

. . . .

"Pictorial, graphic, and sculptural works" include two-dimensional and three-dimensional works of fine, graphic, and applied art, photographs, prints and art reproductions, maps, globes, charts, technical drawings, diagrams, and models. Such works shall include works of artistic craftsmanship insofar as their form but not their mechanical or utilitarian aspects are concerned; ***the design of a useful article***, as defined in this section, ***shall be considered a pictorial, graphic, or sculptural work only if, and only to the extent that, such design incorporates pictorial, graphic, or sculptural features that can be identified separately from, and are capable of existing independently of, the utilitarian aspects of the article***.

. . . .

A "useful article" is an article having an intrinsic utilitarian function ***that is not merely to portray the appearance of the article or to convey information***. An article that is normally a part of a useful article is considered a "useful article".

C. 17 U.S.C. § 102, in pertinent part, provides:

§ 102. Subject matter of copyright: In general

(a) Copyright protection subsists, in accordance with this title, in original works of authorship fixed in any tangible medium of expression, now known or later developed, from which they can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device. Works of authorship include the following categories:

(1) literary works;

(2) musical works, including any accompanying words;

(3) dramatic works, including any accompanying music;

(4) pantomimes and choreographic works;

(5) pictorial, graphic, and sculptural works;

(6) ***motion pictures and other audiovisual works***; and

(7) sound recordings.

(b) In no case does copyright protection for an original work of authorship extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work.

D. 17 U.S.C. § 103, in pertinent part, provides:

§ 103. Subject matter of copyright: Compilations and derivative works

(a) The subject matter of copyright as specified by section 102 includes compilations and derivative works, but protection for a work employing preexisting material in which copyright subsists does not extend to any part of the work in which such material has been used unlawfully.

(b) The copyright in a compilation or derivative work extends only to the material contributed by the author of such work, as distinguished from the preexisting material employed in the work, and does not imply any exclusive right in the preexisting material. The copyright in such work is independent of, and does not affect or enlarge the scope, duration, ownership, or subsistence of, any copyright protection in the preexisting material.

E. 17 U.S.C. § 106, in pertinent part, provides:

§ 106. Exclusive rights in copyrighted works

Subject to sections 107 through 118, ***the owner of copyright*** under this title ***has the exclusive rights*** to do and to authorize any of the following:

(1) to reproduce the copyrighted work in copies or phonorecords;

(2) ***to prepare derivative works based upon the copyrighted work***;

(3) to distribute copies or phonorecords of the copyrighted work to the public by sale or other transfer of ownership, or by rental, lease, or lending;

(4) in the case of literary, musical, dramatic, and choreographic works, pantomimes, and motion pictures and other audiovisual works, to perform the copyrighted work publicly; and

(5) in the case of literary, musical, dramatic, and choreographic works, pantomimes, and pictorial, graphic, or sculptural works, including the individual images of a motion picture or other audiovisual work, to display the copyrighted work publicly.

F. Federal Rule of Civil Procedure 56, in pertinent part, provides:

Rule 56. Summary Judgment

(a) For Claimant. A party seeking to recover upon a claim, counterclaim, or cross-claim or to obtain a declaratory judgment may, at any time after the expiration of 20 days from the commencement of the action or after service of a motion for summary judgment by the adverse party, move with or without supporting affidavits for a summary judgment in the party's favor upon all or any part thereof.

(b) For Defending Party. A party against whom a claim, counterclaim, or cross-claim is asserted or a declaratory judgment is sought may, at any time, move with or without supporting affidavits for a summary judgment in the party's favor as to all or any part thereof.

(c) Motion and Proceedings Thereon. The motion shall be served at least 10 days before the time fixed for the hearing. The adverse party prior to the day of hearing may serve opposing affidavits. The judgment sought shall be rendered forthwith if the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a judgment as a matter of law. A summary judgment, interlocutory in character, may be rendered on the issue of liability alone although there is a genuine issue as to the amount of damages.

(d) Case Not Fully Adjudicated on Motion. If on motion under this rule judgment is not rendered upon the whole case or for all the relief asked and a trial is necessary, the court at the hearing of the motion, by examining the pleadings and the evidence before it and by interrogating counsel, shall if practicable ascertain what material facts exist without substantial controversy and what material facts are actually and in good faith controverted. It shall thereupon make an order specifying the facts that appear without substantial controversy, including the extent to

which the amount of damages or other relief is not in controversy, and directing such further proceedings in the action as are just. Upon the trial of the action the facts so specified shall be deemed established, and the trial shall be conducted accordingly.

(e) Form of Affidavits; Further Testimony; Defense Required. Supporting and opposing affidavits shall be made on personal knowledge, shall set forth such facts as would be admissible in evidence, and shall show affirmatively that the affiant is competent to testify to the matters stated therein. Sworn or certified copies of all papers or parts thereof referred to in an affidavit shall be attached thereto or served therewith. The court may permit affidavits to be supplemented or opposed by depositions, answers to interrogatories, or further affidavits. When a motion for summary judgment is made and supported as provided in this rule, an adverse party may not rest upon the mere allegations or denials of the adverse party's pleading, but the adverse party's response, by affidavits or as otherwise provided in this rule, must set forth specific facts showing that there is a genuine issue for trial. If the adverse party does not so respond, summary judgment, if appropriate, shall be entered against the adverse party.

. . . .

(Emphasis added)

III. OTHER MATERIALS—COLLATION OF SELECTED RECORD EXCERPTS

Evidence re:

1. Originality

[P]eople who simply observe the GUI and play with it a little while do not detect substantial differences between them. They are for all . . . purposes the same product.

[Shafer 199:14-17 (CR 607)]

To the novice user, and potentially even to an experienced user, it looks very similar. It's going to be hard to differentiate those two interfaces.

[Beech 143:15-18 (CR 606, Ex. C)]

Overall, the graphical user interfaces of the Lisa and Macintosh were a major achievement at the time of their introduction. Lisa and more particularly Macintosh represents an elegant integration and expression of the idea of the desktop metaphor and other relating ideas in a visually appealing composite.

[Shneiderman Decl. ¶ 12 (CR 227)]

While there were some computer systems with graphical user interfaces predating Lisa, and some of those systems used design concepts that influenced our work, the Lisa user interface when introduced in 1983 was unique in its overall arrangement and presentation of graphic features and in the introduction of many features not previously used. To my knowledge Lisa was the first personal computer to combine such features as overlapping windows, a fixed menu bar, pull-down menus, icons, and dialog boxes.

[Atkinson Decl. ¶ 13 (CR 231)]

There are certain things that Apple has done that I cannot find any earlier precedent for, that I think are part

of the sort of flavor of what Apple does. I don't have any earlier precedence, I can't think of any earlier precedence for things like the expanding rectangles, for example.

[Seybold 49:11-17 (CR 596)]

The role for the Mac, of course, was to be the first machine to commercialize the graphics interface. It was not the first machine introduced with graphics interface, there were many like the Xerox Star or the Xerox Research machine, the Alto, or even Apple's Lisa. But it was the first to get the combination right.

[Gates Speech, New York PC and Macintosh User's Groups, March 15, 1989 (CR 471, Ex. AF)]

The bottom line of our involvement with the Macintosh is that we find it to be the most innovative environment in personal computing.

[Gates, "The Future of the Macintosh," February 2, 1988 (CR 471, Ex. AG)]

Apple Computer is generally credited with commercializing the graphical user interface with the Macintosh. It brought about a radical change in how people viewed and interacted with their computers. Far easier to use than any previous personal computer, it provided a rich, flexible environment for all users, novice and professional alike. . . .

[Gates, "Graphics for Every Desktop PC," Personal Computing 294, October 1986 (CR 471, Ex. AH)]

In the Finder you can see Apple's representation of a desktop metaphor. Apple's implementation of this metaphor involves the use of graphical displays such as windows, icons, menus. These displays are composed of thousands of

subtle details that contribute collectively to an elegant and artistic interface.

[Kawasaki Statement in Apple's Laserdisc Presentation (CR 473)]

[U]ser interface design is not a science, it's an art. You have to just use your own best judgment, and a lot of times it results in -- falls back on the personality of the designers as to what the best or better approach is.

[Smith 46:23-47:1 (CR 260)]

I was one of the principal designers of the Star. . . . In my opinion, the overall appearance of the Macintosh user interface is very different from that of the Star user interface. . . . The Macintosh includes many features that were not included in Star or are quite different from Star, *e.g.*:

a. One of the reasons the Macintosh interface does not look very much like the Star interface is because the Macintosh uses overlapping windows while Star used tiled windows. . . .

Based on my intimate knowledge of the Star user interface and my familiarity with the Macintosh user interface, and my knowledge of the differences between the two both in terms of overall appearance and individual features, I believe that the Macintosh user interface shows a great deal of originality and innovation. . . . I also believe that the Lisa and Macintosh interfaces are highly creative works of which the Apple employees also should be justifiably proud.

[Smith Decl. ¶¶ 3-5 (CR 226)]

I was involved in the design of portions of the Smalltalk Programming Environment ("Smalltalk"). . . . When I interviewed with Apple Computer in April 1980, I was shown a version of the Lisa user interface that displayed overlapping windows, the opening and closing of windows and the moving and resizing of windows. At the time of this

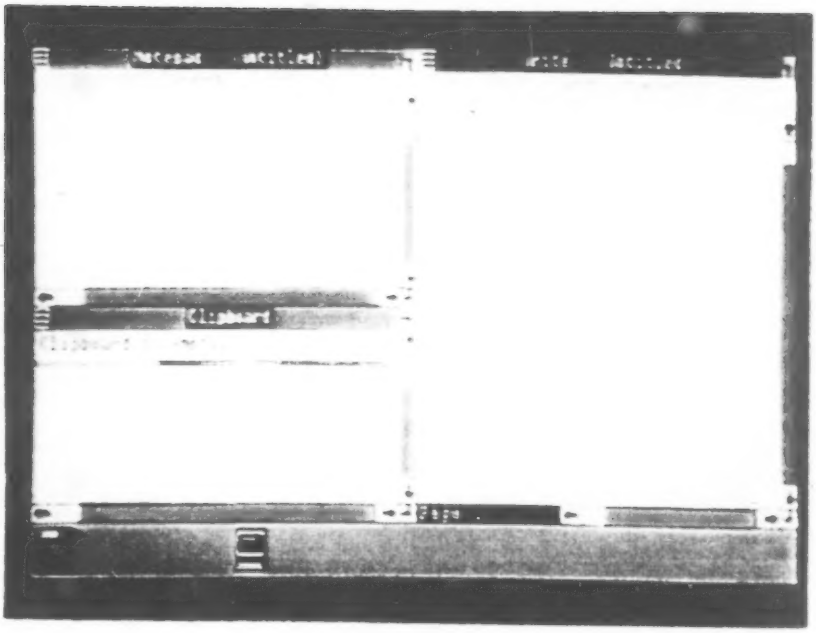
demonstration the Apple audiovisual interface which I saw was very different from the Smalltalk-76 interface which I was familiar with. . . .

Although the Smalltalk and Lisa interfaces are based on the idea of an office metaphor and use some of the same graphic techniques to implement that idea, the overall design and implementation of each interface is quite different. . . .

[Tesler Decl. ¶¶ 3-4, 7 (CR 230)]

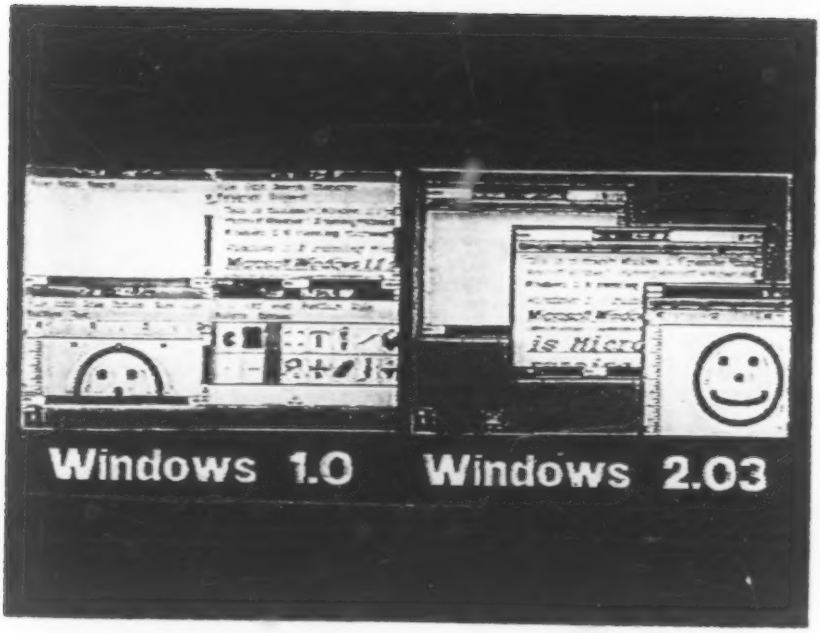
What the user sees and experiences as Apple's intuitive and attractive interface is in reality the product of countless subtle artistic details. When we created the windows and other images that make up Apple's interface, we were motivated to make the appearance of the interface as clean and elegant as we could. Our goal was to make the interface as engaging and attractive as possible for the user. . . . The details of the interface were carefully developed in order to create graphical designs that were truly unique to Apple.

[Wagner Statement in Apple's Laserdisc Presentation (CR 473)]

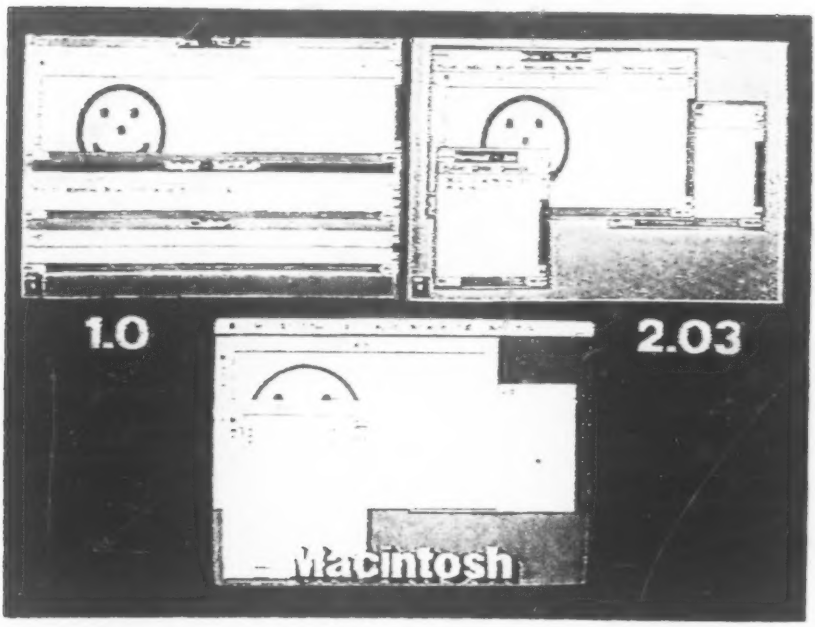


[Windows 1.0 (CR 473)]

[Macintosh (CR 153, Ex. C-1)]



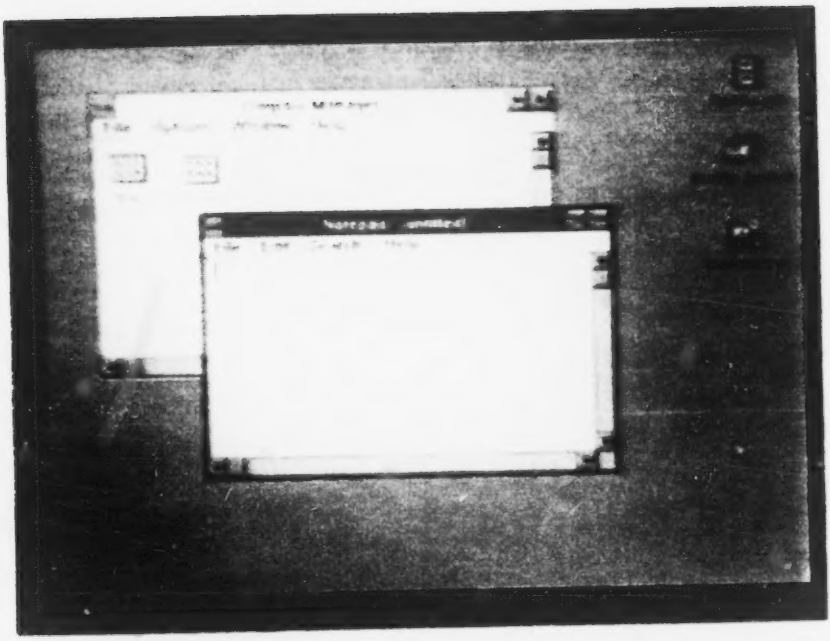
[Windows 1.0 and Windows 2.03 (CR 160, Ex. B-2)]



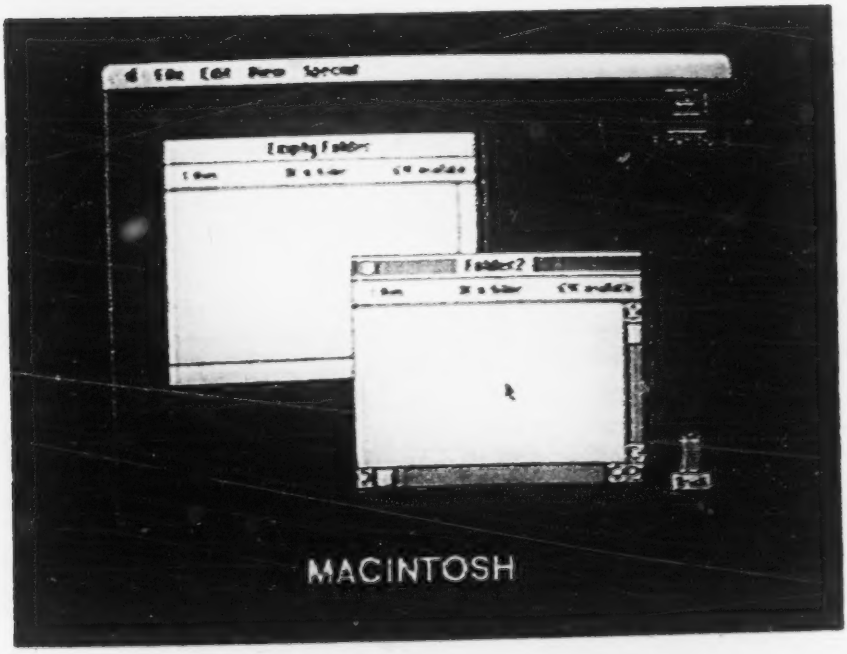
[Windows 1.0, Windows 2.03 and Macintosh (CR 160, Ex. B-2)]

2. Substantial Similarity

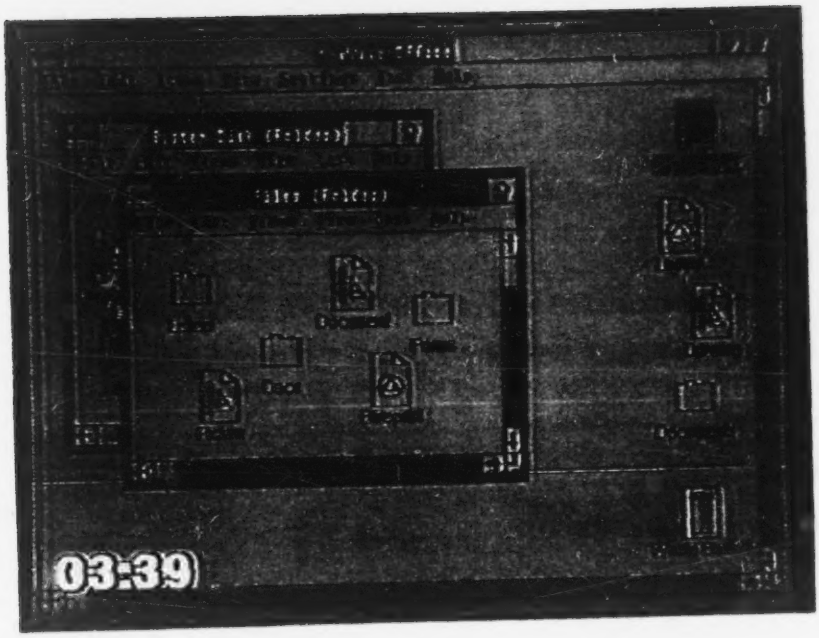
[Screen Shots Appear on the Opposite Side of This Foldout Page]



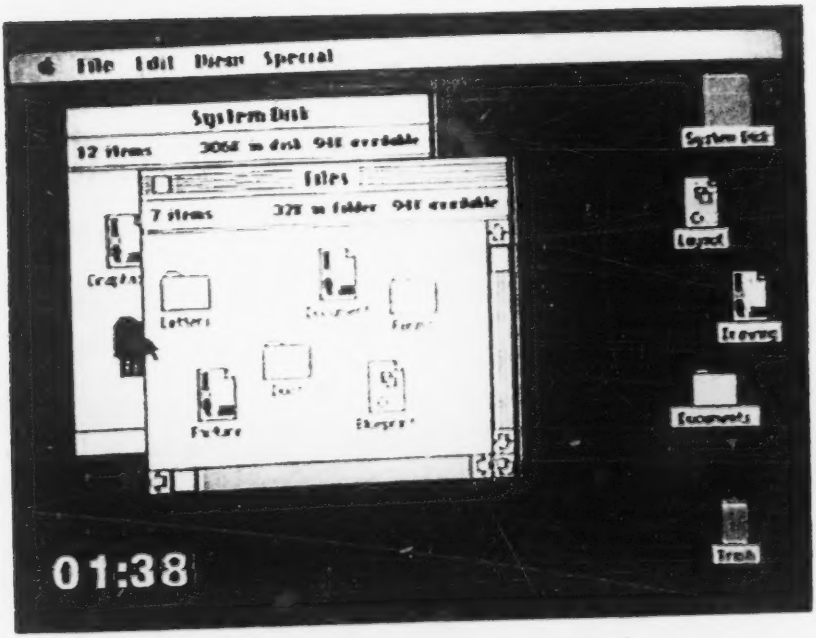
[Windows 3.0 (CR 473)]



[Macintosh (CR 153, Ex. C-1)]



[NewWave (CR 598)]



[Macintosh (CR 598)]

[Screen Shots Appear on the Opposite Side of This Foldout Page]

[A.] The thing that people tell me, the thing I hear from all these different kinds of people I mentioned, is when they look at a Windows machine they have a sense in the totality that it's just like a Macintosh.

Q. And what does that mean, just like a Macintosh? When you hear that, what does that mean?

A. What it means to me is that the user interface is identical or is close to -- so close to identical that people who simply observe the GUI and play with it a little while do not detect substantial differences between them. They are for all -- for their purposes the same product.

[Shafer 199:5-17 (CR 607)]

If someone is just out here looking at the interface, if you walk into a computer store and see them side by side, and you have a salesperson there that is not interested in selling further than the interface, they look alike, and which box goes out the door is -- you know, they certainly don't have any religion about that. To the novice user, and potentially even to an experienced user, it looks very similar. It's going to be hard to differentiate those two interfaces. That's the issue we are talking about here.

[Beech 142:6-143:18 (CR 606, Ex. C)]

Q. But did you think, though, that in pre-installing Windows with the Zenith computers, you were achieving something that was very similar to the appearance of the Macintosh interface?

. . . .

A. Yes.

[Schreiber 116:3-13 (CR 607)]

[W]e should play into corporation's tendency to want IBM while leveraging Apple's success with the graphical user interface. Microsoft Windows 3.0 is offering the ease-of-use and enjoyment of the Macintosh without compromising the

compatibility and security of the IBM PC. This is the best of both worlds and has *never* been offered before.

[Microsoft Windows 3.0 Communications Plan (CR 470, Ex. X)]

"I'm often asked to compare the Macintosh and Windows," [a Windows application designer] says. "From the user's point of view and the programmer's point of view, they're very similar."

[Craig Stinson, "SQL Windows Brings a Graphical User Interface to SQL Database Applications," Microsoft Systems Journal, *May 1988 (CR 607, Abel Ex. 8)]*

His FIRST comment when we booted [Windows] was, "This sure looks like a Mac. Is this legal?"

[Allison Memo to Bill Gates et al., December 19, 1989 (CR 607, Abel Ex. 3)]

Q. It takes a while if you're a user to figure out really that there are differences between those two windows, the difference in the windows in Macintosh and the windows in Windows 3.0, right?

A. It took me some time of using the system to figure that out.

[Foley 216:6-11 (CR 607)]

Until Now, There Have Been Two Computing Worlds...

Zenith Data Systems Introduces The First PCs To Give You The Best Of Both.

It's not a Macintosh. It's the point-and-click simplicity of Microsoft Windows 3.0.

At last, you can have everything you love about the PC... plus the best of Macintosh.*

A new era has dawned. The best of both computing worlds are now one. Brought seamlessly, powerfully together. In every Zenith Data Systems 386, 386 EISA and 386SX desktop PC.

The first and only PCs with Microsoft® Windows™ 3.0 and Asymetrix® ToolBook® *preinstalled*. Plus the Microsoft Mouse.

With the extraordinary new Microsoft Windows 3.0, your Zenith Data Systems PC is transformed into one that's startlingly easy to use.

This powerful graphic environment lets you glide effortlessly, even seamlessly, from one application to another. With just a click of your mouse. It makes operating your PC so easy, your left hand doesn't even have to know what your right is doing.

And when Windows 3.0 runs on a Zenith Data Systems PC, it's running at its best. Because Zenith Data Systems and Microsoft researched the benefits of graphical user interfaces.

You'll also receive the hypermedia application, Asymetrix ToolBook. This "software construction set" lets you create your own Windows 3.0 applications so they do exactly what you want them to do. With the combination of Windows 3.0 and ToolBook, your productivity will soar. With the greatest of ease.

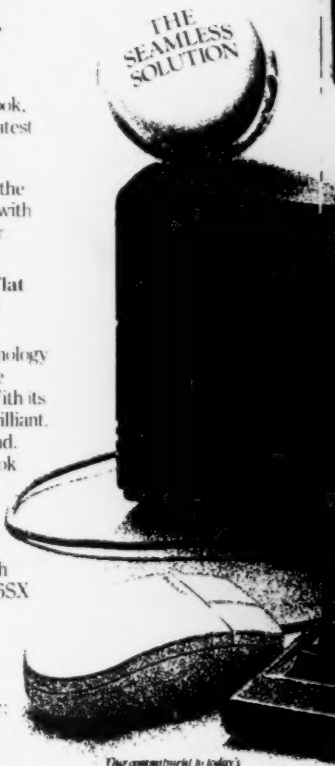
Bought separately, Microsoft Windows 3.0, Asymetrix ToolBook and the Microsoft Mouse are a $643 value.* But with a Zenith Data Systems 386, 386 EISA or 386SX desktop PC, they're all yours.

Add Zenith Data Systems' Flat Technology Monitor for unsurpassed screen graphics.

The award-winning Flat Technology Monitor from Zenith Data Systems is the perfect match for graphical interfaces. With its unique non-glare treatment, you'll see brilliant, true colors fly off the jet-black background. Bringing your Windows 3.0 and ToolBook applications to life with breakthrough clarity.

Who says you can't have it all? Zenith Data Systems says you *can*. The best of the MS-DOS® and Macintosh worlds. With our 386, 386 EISA and 386SX desktop PCs. The seamless solution for *your* computing world.

Start the ball rolling today. Call for the name of your nearest Zenith Data Systems Medallion Reseller: **1-800-523-9393.**



Our commitment to today's graphical user interfaces is why the Microsoft Mouse is standard equipment.

The Zenith Data Systems Sphere
The universal symbol of simplicity, the sphere perfectly represents ***The Seamless Solution™*** *from Zenith Data Systems.*

ZENITH DATA SYSTEMS INNOVATES AGAIN™

ZENITH data systems

Groupe Bull

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The Wall Street Journal
June 7, 1990, pp. A7–A9

[Zenith Data Systems Advertisement, The Wall Street Journal, June 7, 1990 (CR 470, Ex. W)]

[Windows 3.0] [v]ery closely resembles the Macintosh as far as the user interface is concerned.

Duplicates Mac environment, end-user easy.

Duplicates Mac environment--not original.

Using Windows is a lot of glitz. It's like Macintosh.

["Windows 3.0 Usage Survey Among BYTE Readers," April 1991 (CR 607, Boyer Ex. 8)]

I had other respondents say the Windows 3.0 interface had a similar look and feel to Macintosh.

[Baker 130:23-131:1 (CR 607)]

Tandy [Trower] feels that the primary communication points for Windows are:

- Windows is Mac plus Topview.

[Edstrom et al., "Conference Report," April 24, 1985 (CR 471, Ex. AM)]

As we have already alluded to there are some aspects of the windows -- of the visual appearance of a Windows' window, of an individual window, with scroll bars and arrows on it, that is more similar to the Macintosh than to any other. And therefore if someone is looking at just a window on the screen and there is no interaction, there is no animation, they are looking at the window on the screen, if you put up several windows and show people pictures of several different windows, most people would say this window is most similar -- that is the Windows' window is most similar to a Macintosh window, and the next window is much less similar because of the different visual appearance.

[Seybold 205:19-206:8 (CR 607)]

There are two levels at which I view the similarities between the Windows 3 interface and the Macintosh interface to be substantially similar.

One is in the overall impression one gets from a first look at the two machines running side by side. If one simply looks at the desktops, even though things might be arranged somewhat differently because some particular user likes moving things in a different place, the impression one has is that they're pretty much the same thing. They -- they sort of look like the same thing to the lay observer who yet hasn't touched the keyboard or a mouse; just looked at the things and, you know, in a general context has the feeling that they're the same.

And then there's another level at which I view them as being substantially similar, and that is in the way a number of specific elements that appear in the Macintosh interface are transferred wholesale or adapted over the Windows 3 environment where not just their appearance but their behavior is for all purposes identical -- for all practical purposes identical . . . .

[Shafer 91:17-92:14 (CR 607)]

[M]y impression strongly overall was [Windows 3.0] is still substantially similar to the Macintosh.

[Shneiderman 640:16-17 (CR 607)]

HP NewWave was designed to get all your software talking. All the clamor from the media is purely coincidental.

"NewWave's attractive icon-based interface eliminates the need to be concerned with the directory structures and file types of MS-DOS. A data file and the program code used to create, display, and print it are treated as a single object. To work with a file, you select the icon that represents both. To print the file, you move its icon on top of one that represents your printer."
—PC/Computing

"The HP NewWave environment takes Microsoft Windows into an entirely different dimension—one defined by objects, icons, and agents. The new terminology spells incredible, almost instinctive, ease of use, plus dramatically shorter software development times."**
—PC Magazine

"Under NewWave, (Lotus) 1-2-3 gains a lot of features and functions it never even had under DOS, even though it's not a NewWave application."
—PC Week

"The icon-oriented NewWave 'office' resembles the Macintosh Finder but is much more capable."*
—PC/Computing

"NewWave provides the best environment available today for combining traditional DOS applications with object-oriented principles."
—Datapro

"Recognized by over 600 members of the Software Publisher's Association for Best Design Achievement and Best Business Application in 1989."
—Software Publisher's Association

"NewWave Write comes with a few bonus features that the other products don't have—for instance, it 'remembers' from the previous session which documents are still being worked on, and opens them automatically."
—PC Week

"...NewWave is a splendid example of the kind of software innovation that is revolutionizing PC use."
—MIS Week

"You've heard it before, but this time it's for real. This is the year of the object. Hewlett-Packard's NewWave is going to be the forerunner for a lot of exciting things for the 1990s."
—MIS Week

"The appearance and functionality of the NewWave environment replicate the legendary Macintosh ease of use to a greater degree than any other PC graphical user interface to date."
—Datapro

"Definitely the shape of things to come."
—Practical Computing

"Hewlett-Packard's NewWave is built on top of Microsoft Windows, and it bears a strong resemblance to the Macintosh desktop. It redefines how people should use software and how developers should build it."
—PC/Computing

"Hewlett-Packard's NewWave is an exceptional advance in user interface design, rendering PC software dramatically more capable and simple to use. It also beats the pants off of the disappointing OS/2."*
—PC/Computing

"The vendors backing NewWave read like a Who's Who of the providers of some of the most innovative products for IBM and compatible systems... about as close to state-of-the-art as you can get."
—PC Week

"...NewWave looks much like Windows, on which it is based, but it goes much further."
—Practical Computing

datapro
SOFTWARE OF THE YEAR-1989

"We feel that NewWave captures the spirit of desktop computing for the future and earns the distinction of 'Software Product of the Year.'"
—Datapro

"Its Object Management Facility brings with it object-oriented capabilities that, for the first time, meet, if not exceed, the capabilities of the technology underlying the Apple Macintosh user interface."
—PC Week

"NewWave...is a significant step ahead, technologically, of anything already found in DOS and OS/2 user environments."
—PC Week

"All of this makes HP's NewWave wonderful. It's easier to use than Windows, more powerful than the Mac, and a joy to work with."*
—PC/Computing

"These are nice capabilities, but what makes the $195 NewWave more than just another pretty interface is its ability to use these objects to contain or manipulate other objects."
—PC/Computing

"NewWave's object management facility is its most powerful feature. The system treats a data file and the application that manipulates it as a single object. This enables users to invoke one application within another...NewWave's object management also lets users create hot links between objects to share and dynamically update data."
—InfoWorld

"Not Just Another Pretty Interface, NewWave Redefines Software Use."*
—PC/Computing

"HP provides several levels of integration for DOS applications in the NewWave environment, ranging from running under the iconic desktop and swapping data via the Clipboard, to full compatibility."
—Practical Computing

"In addition to its object management features, NewWave overlays Microsoft Windows with a truly intuitive graphical front end, finally achieving Macintosh-like ease of use for the PC."
—Datapro

Info World
October 8, 1990, pp. 50-51

A number of prominent magazines subscribe to HP NewWave software. The software that lets you instantly integrate applications and automate tasks.

In one amazingly simple step, you can create, edit and pull together documents using text, spreadsheet, graphics, and image data from different NewWave applications.

Then, without leaving a document, you can make changes in the data of one application and have them automatically reflected in the data of the others.

What's more, HP NewWave software integrates new technologies like voice, video and fax which are now being developed by leading software vendors.

Right out of the box, HP NewWave software allows you to move effortlessly among thousands of MS-DOS* and Microsoft* Windows applications!

Soon, HP NewWave will allow you to automate tasks across applications from different vendors. The NewWave agent will record any tasks you perform once, and then repeat them automatically at dates and times you schedule. It will even perform interactive tasks, prompting you and asking you questions.

It's no wonder Software Publisher's Association, PC/Computing and Datapro have awarded premier distinction to HP NewWave software. If this all sounds too good to be true, call **1-800-752-0900, Ext. 1290** to find out the name and address of a nearby dealer. (In Canada, call 1-800-387-3867, Dept. 127.) Buy HP NewWave software today and you'll be singing its praises tomorrow.

HEWLETT PACKARD

*HP NewWave software requires Microsoft Windows 3.0 and an Intel 286 or 386 based PC with 640 Kb RAM and 2 Mb extended memory.
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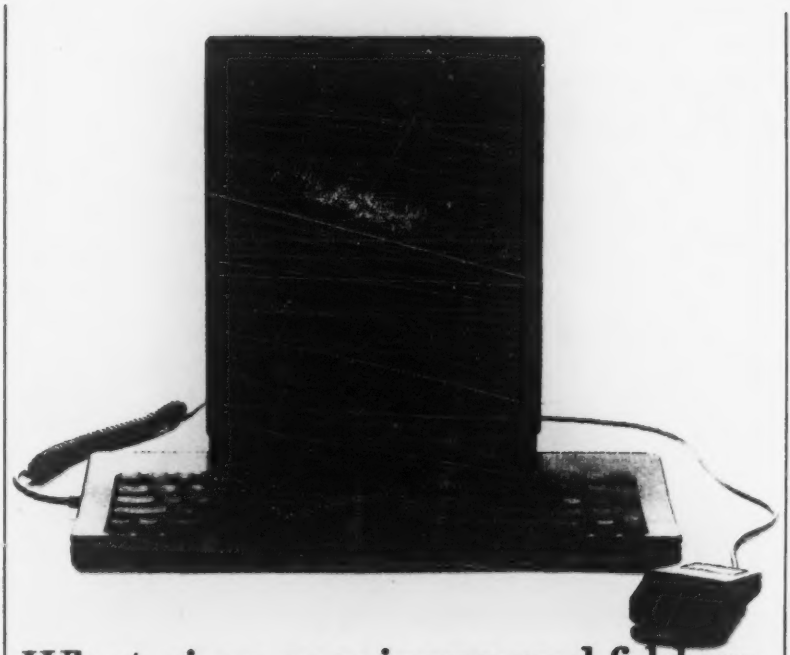
[NewWave Advertisement, Infoworld, *October 8, 1990 (CR 471, Ex. AA)]*



What gives you icons and folders, is easier than Windows, and comes with $25 back?

NewWave for Windows

Until now, if you wanted a PC desktop that's as easy to use as a Mac, you've been left in the dark.

But now you can add HP NewWave to Windows for a simpler desktop. It turns all your DOS and Windows files and programs into icons. Then lets you group them in folders, by project, the way you do on your real desktop.

A file and its program are automatically linked. They open simultaneously. You save steps, and never have to worry about where things are on your PC.

The result? Your work is easier to organize and faster to complete. All for about the cost of a mouse.

Best of all, this is just one of the advantages that made NewWave *PC Magazine*'s "Environment of the Year."

Buy it at your dealer today. Our $25 rebate offer is about to end.

HEWLETT PACKARD

Buy now and get $25 back

Purchase HP NewWave between 11/1/91 and 12/31/91, then send this coupon, original product registration card, and your original sales receipt to HP Program Awards Center, P.O. Box 59068, Minneapolis, MN 55459-0068. Must be postmarked by 1/13/92. Suggested Retail Price $195. Actual price may vary.

Name & Title

Company Phone

Street Address

City, State, Zip

Want to learn more? Get our interactive demo disk ($3.95 handling charge)

Call 1-800-345-9111 x 23C4

PC Magazine
November 12, 1991, p. 67

[NewWave Advertisement, PC Magazine, *November 12, 1991 (CR 471, Ex. AB)]*

A lot of people may confuse HP NewWave software with the look and feel of a Mac. That's because it's a simple Mac-like desktop for Windows.

[NewWave Advertisement Proposed in Memo to Ferrari, June 6, 1991 (CR 471, Ex. AC)]

Q. Read, if you would, the opening line of the copy. Just read it out loud.

A. "A lot of people may confuse HP NewWave software with the look and feel of a Mac."

Q. And that was the proposed opening statement so to speak for the lead, for the ad; correct?

A. Proposed by Ogilvy & Mathers, yes.

. . . .

Q. Read the note, if you would, to the right of that sentence. Can you read the handwritten note?

A. "Not a good head," probably for headline. "That is what the lawsuit," probably says is about or something like that, but referring to the lawsuit.

. . . .

Q. In fact, was there a discussion that this was not a good lead, because this is exactly what is alleged in the lawsuit, that NewWave has the look and feel of the MacIntosh?

A. That was the opinion of the person who wrote that.

Q. Was there a discussion of that among your group?

A. Yes.

. . . .

[Q.] So, of the HP personnel who reviewed this proposed ad, nobody made a notation that it's inaccurate to say that NewWave has the look and feel of a MacIntosh, correct?

A. Not that I can recall.

[Ferrari 132:9-141:11 (CR 472)]

[T]he similarity in appearance between NewWave and the Macintosh is due in large part to the reliance of NewWave on Windows 2.03, a Microsoft product introduced in 1987.

[Galler Statement in Apple's Laserdisc Presentation (CR 473)]

I do think that the changes that NewWave makes to Windows makes NewWave closer to the Apple User Interface than Windows is. And that some of those things . . . are things which . . . are part of things which are specific to Apple.

. . . .

. . . [J]ust from having looked at NewWave, my reaction, when I looked at NewWave, was that it does make Windows look and act more Macintosh-like.

[Seybold 51:5-16, 82:9-12 (CR 607)]

"[NewWave is] similar to the MacIntosh," says product manager Ken DeAngelo, but with more features.

[Paul Freiberger, "H-P's new wave look," San Francisco Examiner, *February 28, 1988 (CR 470, Ex. G)]*

Q16. How does NewWave compare to what Apple offers with its Macintosh system?

A16. Although it is visually similar to the Macintosh, the NewWave environment has a number of features and benefits that the Macintosh does not offer.

[HP "Press Q&As--HP NewWave Environment" (CR 470, Ex. H)]

The desktop [of NewWave] is similar to the Macintosh Finder -- The look and feel of the user interface is strikingly similar. The Desktop provides the user interface for creating, deleting, opening, and moving objects around.

[Memorandum from Grabner to Gates et al., December 17, 1987 (CR 470, Ex. F)]

The [NewWave] desktop is similar to the Macintosh Finder - The look and feel of the user interface is strikingly similar.

[NewWave Review Given by Microsoft to Edstrom, November 8, 1988 (CR 607, Edstrom Ex. 618)]

[W]hat I said was it's an enhancement for Windows with an easy to use desktop environment that helps increase productivity. Finally, the Macintosh on a PC.

Would you recommend NewWave -- yes. Why -- because it's got a Macintosh-like interface, which is why Macintosh is what it is today.

[NewWave Focus Groups Conducted by HP, July 1991 (CR 482, Ex. 4)]

[T]here has been an understandable aversion in HP to identifying NewWave's user interface paradigm as "Macintosh-like," which it clearly happens to be.

[Morris & Associates Working Paper, "New Wave Positioning & Strategy," June 22-23, 1989 (CR 607, McDonnell Ex. 7)]

Q. So these are all features [overlapping windows, inverse video, close box in upper left-hand corner of window, scrollbars on the sides of windows, arrows on scroll bars on the top pointing up and on the bottom pointing down, and the name of the file centered in the title bar] that could be considered Mac-like attributes for NewWave; isn't that correct?

A. Yes.

[Morris 143:21-146:5 (CR 607)]

Windows is a graphical user interface so that the user unfriendly MS-DOS machines will become user friendly like the MacIntosh. Basically, Windows is an attempt to clone what Steve Jobs did.

NewWave is an enhancement product for Windows 3.0 that brings the performance of Windows much closer to the MacIntosh.

For me, for a person that's worked with both Mac and IBM, this is a Mac environment for an IBM product.

[Ferrari Memo, "HP NewWave Focus Group Results," September 24, 1990 (CR 607, Walker Ex. 902)]

Users [see NewWave as] [m]ore Mac-like . . . .

[HP NewWave Focus Groups Management Summary, July 1991 (CR 607, Walker Ex. 901)]

Q. Does NewWave have a similar appearance as Apple Macintosh?

A. The screen?

Q. The screen displays, yes.

A. I think, yes.

[Gupta 74:19-23 (CR 607)]

"Hewlett-Packard's HP NewWave...combines the best of the Macintosh graphical user interface with the best of the PC open architecture . . . ."

[Logan Quotation in HP Slide Entitled "Industry Quotes on HP NewWave" (CR 607, RFA 114)]

"[C]ombines the best of the Mac graphical user interface and the PC open architecture . . ."

[Logan Quotation in Proposed NewWave Advertisement for the BusinessLand Catalog, Attachment to May 2, 1991 HP Marketing Memo (CR 607, Walker Ex. 919)]

Q. What was the thinking as to why you wanted to refer to the Macintosh?

A. I think I covered that earlier. It's, again, the gold standard, the point of reference that the -- that all PC users have, whether they're education, government or corporate America.

When the word "GUI" comes up, even if you don't know the acronym, you think of the MAC as being representative of graphical computing . . . .

[Schreiber 135:16-24 (CR 472)]

Q. Was the [advertising] strategy proposed by Ogilvy & Mather accepted by HP?

A. Yes.

Q. Part of that strategy was to make a comparison to the MacIntosh, was it not?

. . . .

[A.] The ads which resulted from this is the ad I was referring to earlier when you asked me about had we done any direct comparisons with the MacIntosh.

The end result was the [ad] -- we internally called the MacIntosh ad.

[Walker 117:11-22 (CR 472)]

Q. . . . You would agree that the appearance of the Windows user interface was influenced by the Macintosh, right?

A. Yeah. It was influenced.

Q. In fact, it has a number of similarities with the Macintosh user interface, correct?

A. Yes.

Q. That's true for Windows 2.03 and Windows 3.0, right?

A. That's correct.

[Konzen 205:3-12 (CR 472)]

Hi Jody, and congratulations on your new Program Manager assignment. We folks over here on the DOS side sorely need somebody with experience in the Macintosh arena, such as you have. In my daily dealing with accounts, one of the things I constantly get beat up on is the unfriendly nature of the MS-DOS Executive. . . .

. . . I am constantly asked, when is the MS-DOS Executive going to look like a Macintosh.

[E-mail to Snodgrass, April 25, 1988 (CR 470, Ex. K)]

It seems to me that Apple has spent more time polishing their visual interface trying to make it as aesthetically pleasing as possible. One of the ways they've managed to do this is by having a graphic design artist assigned to every

project, instead of letting technical people decide some of these issues. I think we should consider doing this for our Windows apps (and for Windows itself).

[E-mail from Davis to Snodgrass, June 27, 1988 (CR 470, Ex. T)]

We should support a proportional system font.

With my Windows vs. Mac perspective, I believe that the technical/functional stuff is in order on Win and Win386 but the aesthetics need to be fixed up a lot.

The proportional system font is a very important component to this.

[E-mail from Davis to Snodgrass, June 29, 1988 (CR 470, Ex. Q)]

Since coming to Microsoft, I have begin [sic] using the Mac. I had heard lots about how great the Mac was but could explain that PM and Windows were catching up.

After using it for a while, it seems much more pleasant to use. Thinking about it, I decided it is better looking. They seem to have made the screen much more pleasant. . . .

I understand that proportional fonts make a big difference and that you have a demo. Could you set up for me to see?

[E-mail from Maples to Snodgrass, Gates et al., July 16, 1988 (CR 470, Ex. P]

Here's another enhancement request for Windows 3.0 that I forgot about earlier: we would like hierarchical menus (aka submenus), like the ones on the Macintosh . . . .

[Microsoft E-mail to Snodgrass, July 19, 1988 (CR 470, Ex. P)]

The Mac's AEQ (Aesthetic Quotient) has always been hirer [sic] than the Windows', despite Windows lead in

multitasking. I think that there is more than fonts. The thickness of lines, proportions of boxes, scroll bars, and graphical nuances may seem trivial, but contribute to a perceptible elegance. If we could achieve this in Windows . . . we would have a system and applications that would be far more appealing to the averge [sic] user.

[E-mail to Maples entitled "Mac v. Windows," July 19, 1988 (CR 470, Ex. P)]

Two of the major changes Microsoft made to the Windows product in developing Version 3.0 were the addition of the Program Manager and File Manager to replace the MS-DOS Executive of Windows 2.03. The MS-DOS Executive was a text-based system for launching applications and managing files or documents. Attached as Exhibit A is a picture of the MS-DOS Executive taken from the User's Manual for Windows 2.0. The Program Manager and File Manager features of Windows 3.0 serve much the same purpose as MS-DOS Executive (starting applications and managing documents and files) but are much more graphical in appearance, making extensive use of icons to represent applications and files in a manner similar to the Lisa and Macintosh audiovisual works.

. . . The Program Manager displays icons to represent application programs, documents, and groups of application programs or documents. Attached as Exhibit B is a picture of the Program Manager display taken from Microsoft's Windows 3.0 User's Manual. The arrangement and display of icons in Program Manager, including the visual representation showing the use of icons, is similar to the arrangement and display of icons in Macintosh Finder.

. . . In File Manager, an application program, document, or directory is represented by a name and a small icon appearing to the left of the name. . . . Attached as Exhibit C is a picture of the File Manager display from Windows 3.0.

This design and arrangement in File Manager is similar to the Lisa Desktop, one of the works in suit.

*[Galler Decl. ¶¶ 3-5 (CR 475)]**

* *Galler Exhibits A, B and C appear on the facing page.*

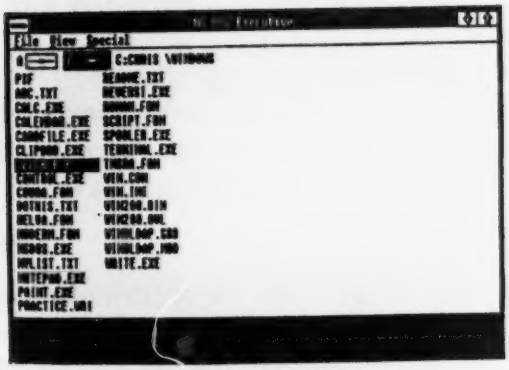


EXHIBIT A

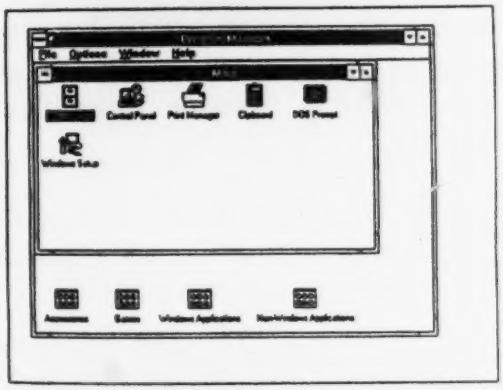


EXHIBIT B

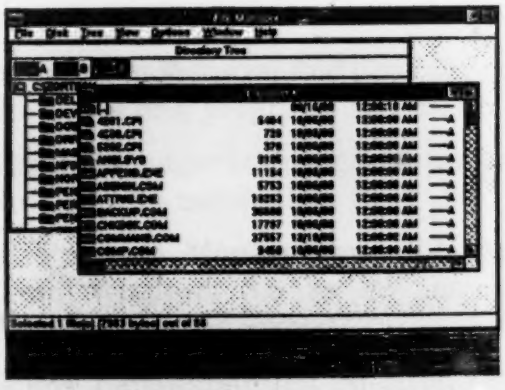


EXHIBIT C

[Galler Decl. (CR 475, Exs. A, B, C)]

Q. So you were working on the development of what was to become Windows 3.0, correct?

A. Correct.

Q. And priority four says that you were considering a feature that was called Starter Application/Desktop Manager, that was the name of the feature?

A. Yeah.

Q. And according to the report you prepared, the Starter Application/Desktop Manager is an improvement over the MS-DOS Executive, correct?

A. Uh-huh.

Q. And you said, "Specifically improvements are starter and switcher capabilities as well as other features borrowed from the Mac Finder," correct?

A. That's what's written here.

Q. And isn't it correct that eventually you integrated Program Manager and File Manager into Windows 3.0, correct?

A. That's also true.

Q. And Program Manager and File Manager effectively replaced MS-DOS Executive.

A. Yes.

Q. And Program Manager and File Manager performed the functions of starting programs and manipulating files.

A. Program Manager is a program starter, and the File Manager allows you to manipulate files.

Q. And Program Manager and File Manager were integrated into Windows 3.0 as an improvement over MS-DOS Executive, is that correct?

A. I believe I answered that question already. Yes.

[Barrett 187:17-188:21 (CR 472)]

"MUST" Features

. . . Support of the Multiple Document Interface

This is an enhancement to the Windows user interface. It provides for parent-window control of child-window processes. It also allows child windows to "overlap" parent windows and one another, rather than to tile. ("MAC in the box")

[Microsoft/HP Meeting Agenda, January 20, 1987 (CR 471, Ex. AS)]

The Apple Model Imitation is the sincerest form of flattery. . . . It is entirely possible that ZDS in an attempt to "flatter" Apple even more, will sell a machine based on a powerful Intel microprocessor, that has an amazingly similar look and feel to the "information appliance," i.e., the MacIntosh.

[Microsoft's Graphical User Interface Marketing Plan, June 1989 (CR 470, Ex. V)]

[Q.] Okay. Is there anything about the Windows 3.0 interface that you believe was not independently created?

A. I think there are substantial similarities between the visual image presented by Windows 3 and the Macintosh image. And without pointing to any specific aspects that I believe must have been not done independently, the degree of substantial similarity leads me to believe that there was development that was not independent in the sense of being influenced by the existence of the Macintosh graphical user interface.

Q. Fine. And what aspects of Windows 3.0 lead you to that conclusion?

A. Starting from the top down, the choice of the desktop metaphor, the use of windows, overlapping windows, a great many things that were on the list of issues that we have been discussing earlier such as the choice of putting the closed box in the upper left-hand corner and various

things like that, the use of the outline in moving a window, the ability to manipulate and move icons around. The general appearance of the way icons and windows are manipulated and treated lead to an impression of substantial similarity in the overall graphical user interface.

[Galler 171:18-172:18 (CR 607)]

3. Indispensible Expression (Design Alternatives)

The desktop metaphor can be interpreted and expressed in many different ways. I believe that designers have merely scratched the surface in what may be useful in incorporating desktop metaphors since the expressive choices are limitless. . . .

It was not necessary for Microsoft or Hewlett-Packard to adopt a user interface substantially similar in overall appearance to Apple's Macintosh user interface. . . . [E]ven though they chose the desktop metaphor, there was no reason Microsoft and Hewlett-Packard were required to adopt an appearance of multiple windows (static or animated) or icons (static or animated) substantially similar to that of the Macintosh. . . .

. . . [T]here are numerous visual alternatives which exist for dividing a computer screen. The screen can be divided so as to permit the viewing of multiple objects such as documents or applications in many ways, some of which utilize multiple windows and some of which do not. . . .

Even in a "windowing" system, windows (which themselves may have numerous different appearances) may be arranged in a variety of ways. Some of the alternatives include: full screen windows with rapid switching, one-dimensional tiling with complete screen coverage (with horizontal or vertical splits or a combination), one-dimensional tiling with incomplete screen coverage, "rooms" with overlapping windows, "piles" of tiles (completely overlapping windows, tiled) with complete screen coverage (with automatic or assigned placement or user controlled placement and with various numbers and configurations of

piles), cascades (or stacks) of overlapping windows, overlapping windows with previous position/size openings, overlapping windows with user-specified openings, overlapping windows with windows partially off the screen, tiled or overlapping windows with synchronized scrolling and various combinations of tiled and overlapping windows. I have seen examples of most of these alternatives demonstrated in either commercial products or laboratory prototypes. . . . Coupled with the myriad alternatives for designing individual windows, the foregoing alternatives for arranging multiple windows result in an infinite number of ways multiple windows may appear on the screen. . . .

In addition to the various alternatives for the static display of multiple windows, there are numerous ways those windows may be animated to be moved, sized, activated, inactivated, opened or closed. . . .

. . . [T]here are numerous graphic alternatives for their visual appearance, including size, shape, location and the appearance titles (if any). Icons can be designed to change size, shape or color depending on the size, date or other attributes or status of the objects represented by the icon. . . .

. . . [T]here are a number of ways to visually represent to the user that one or more icons has been selected such as using inverse video, color, texture, shading, blinking, a surrounding box or other shape, or by three dimensional pop-up effects. The potential for other alternatives for the appearance of selection is great and largely unexplored to date. . . . Animation for moving, deleting, opening and closing icons also offers numerous alternatives in visual appearance. . . .

When a new user interface problem is first encountered, it often seems that there is only one effective solution, but over time many alternatives usually emerge. The initial approach is not always the best nor the one that endures. Over time the range of possible solutions usually broadens and what was once seen as the only solution becomes a

generic category of solutions with multiple unique expressions and visual appearances.

[Shneiderman Decl. ¶¶ 11, 14-19 (CR 227)]

In more than 15 years as an instructor and researcher in user interface design, I have found that there are many visually distinct ways to organize and present information on a computer screen. Some of these involve the use of windows, others do not. Even when multiple windows are used, there are many ways to show an individual window and many ways to show the arrangements of multiple windows.

. . . .

There was no requirement for the developers of NewWave and Windows to adopt an appearance and animation of windows and icons that was so similar to the Macintosh. Furthermore, there was no requirement for them to adopt an overall appearance that was so similar to the Macintosh.

[Shneiderman Statement in Apple's Laserdisc Presentation (CR 473)]

Window movement: Movement can be displayed in a wide variety of ways. Where it is possible to move the entire window [Apollo Domain, DesqView, NeXT] this seems preferable, but when not possible a grid [X-Windows], a window corner [Smalltalk], or an X/OR'd gray shadow [Tektronix Smalltalk] are just a few of the possibilities open to developers. Movement by dragging on the title bar is also a distinctive feature of the Macintosh that was copied by designers of later systems.

. . . .

Window resizing: Window sizing animation can be shown by directly shrinking the window, by showing an outline, by showing a gray or black area, by showing a grid

. . . . Windows 2.03 and 3.0 use animation similar to the Macintosh . . . .

[Shneiderman Supplemental Decl. ¶¶ 4a, 4e (CR 594)]

I think there are many, many, many, many kinds of tiling strategies and many, many, many kind[s] of overlapping strategies and there are others which do not fit either of those descriptions or fit both descriptions.

[Shneiderman 276:6-10 (CR 267)]

In the sense of the design alternatives that the designer of the user interface has, there are no -- in my opinion there are no real limitations, except those that are similar to those that you find in theatrical design . . . [w]ithin the confines of the theatre . . . there are no real limitations as to the design that you carry out in order to evoke desired things from the audience.

[Kay 122:24-123:7 (CR 260)]

Q. Okay. Do you agree that even with the constraints of a hardware environment or the various hardware environments that are available, that the range of choices open to the designer is quite large?

A. There are a number of design choices open to the designer.

Q. Even with the hardware constraints?

A. Even with the hardware constraints there are a number of choices available to a designer.

. . . .

Q. For example, window -- a user interface designer has a number of choices in designing the individual windows themselves, right?

A. There are choices. There are choices. There are always choices to be made.

. . . .

Q. You agree that there are a number of different windowing strategies that are available to the designer of a graphical user interface?

A. Sure. There are different ways to do things.

[Foley 124:2-11, 136:1-5, 153:3-7 (CR 553)]

Q. You testified as an expert witness for Weyerhaeuser once, didn't you?

A. That's right.

Q. Do you recall giving testimony there about the range of particular choices available to the designer of a graphical user interface?

A. That was I think one of the things that was discussed.

Q. I'm going to read you a question and answer from a deposition that you gave in that case.

A. Okay.

Q. "Let's take what you mean by the space of design interface. Am I correct in understanding what you're saying is among all of the particular choices one could make for going about the interface, that's the space, the world of interface?"

Answer: "Yes. There's a world of millions, if not billions, indeed there's a world of trillions of user interfaces to carry out a particular objective."

Does that sound like your testimony?

A. If those are indeed the words that are recorded here, then indeed it is my testimony.

[Foley 260:5-261:4 (CR 596)]

Q. So, from your perspective, is it fair to say that when Microsoft was developing Windows 2.03 or Windows 3.0, it

could have implemented a different visualization and a different conceptual model from Presentation Manager?

A. Yes.

. . . .

Q. Given the artistic limitations of the number of colors and pixel density, do you agree that there is a wide range of artistic alternatives for the expression of metaphors in a user interface design?

A. I believe so.

. . . .

Q. Do you agree that within the limitations, the artistic limitations of the number of colors and pixel density, that there are a wide variety of artistic alternatives available to depict multiple windows on a screen?

A. I believe so.

. . . .

Q. Mr. Berry, when a window becomes active or becomes activated, is it fair to say that there are a number of different visual appearances that can be implemented or used by [the] user interface designer in depicting that activating of the window?

A. I believe so.

. . . .

Q. . . . Is it fair to say that there are a number of different visual appearances that can be used to dictate -- to depict the concept of dragging and dropping in a user interface?

A. Yes.

[Berry 107:19-24, 111:10-14, 112:12-17, 115:18-23 (CR 728)]

Q. How many ways are there to arrange windows on the screen so they do overlap?

[A.] There are an infinite number of ways to do that.

. . . .

Q. . . . Are you merely talking about the difference being the exact positions of the windows on the screen, or is there something different in the methods used to arrange them?

A. No matter which way the question's taken, I would give that answer.

[Tesler 83:12-84:1 (CR 260)]

We considered many, many, many alternatives [for arranging windows on the screen].

[Ludolph 60:18 (CR 260)]

Q. Would it be fair to say that, in essence, overlapping the windows is a way of maximizing the available screen real estate?

A. There are other approaches which would achieve the same results.

Q. Can you give me an example?

A. Well, one would be simply to not have multiple windows open at the same time, but rather to transition between say an icon state and a window state, on a click by click basis.

Q. Can you think of other methods of maximizing screen real estate other -- which involve having multiple windows on the screen, other than overlapping?

A. One would be to have smaller windows side by side with a button on them to expand them to full screen size, when you were interested in them, and then to shrink them back down when you were no longer interested and wanted to look at another window. And -- and that, in fact,

probably provides more use of screen real estate, perhaps the most use of screen real estate.

[Ludolph 58:20-59:13 (CR 596)]

Q. Okay. Can you tell me then why you wanted to make the change from windows to views in terms of the terminology used?

A. When you say window to somebody, they immediately think of a rectangle. Maybe they'll put a little curve at the top, but the idea of a porthole through which you see and possibly modify information doesn't have to have that particular shape. And I don't like constraining people's minds by putting overly constraining words on them.

[Goldberg 181:11-20 (CR 472)]

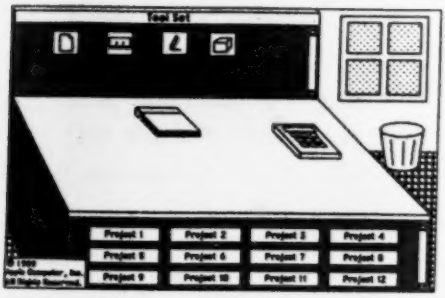
[T]he visual design of a computer user interface is a rich medium permitting a wide range of expression. . . .

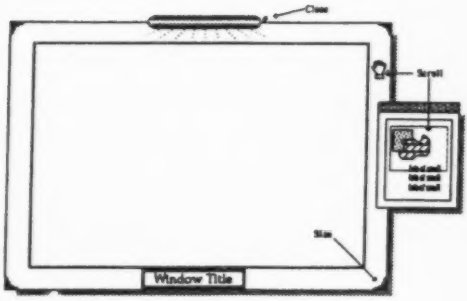
Many alternatives were considered by the Lisa team for design of the overall Lisa user interface, such as the window design, the appearance of multiple windows, window animation, the system font, design of icons, icon animation, title bars, scroll bars and grow box. Our work on the Lisa user interface was original and unique, the result of a painstaking iterative design process. We worked to make the appearance of the interface as aesthetically clean, or "smart" looking as we could. . . .

In April 1989, I was asked in connection with this case to conduct a short exercise in developing different expressions of a user interface based upon a desktop or office metaphor. Along with four other human interface engineers, some of whom are also graphic designers, in two hours we conceived a number of different designs of windows and user interfaces with multiple windows. Rough

drawings of these alternative approaches are attached as Exhibit 1.

[Wagner Decl. ¶¶ 2-4 (CR 229)]





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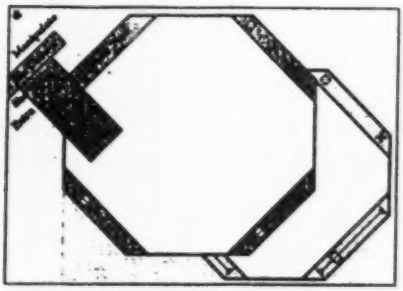

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[Wagner Decl. (CR 229, Ex. 1)]

The design of the Macintosh user interface was a time consuming process requiring the development and consideration of numerous alternative designs and hundreds of decisions about the design of the interface. We spent months working to design and program the screen images to attain the look and the animation that we wanted. We often developed and critiqued multiple designs before writing the code to implement those designs. The development of the Macintosh Finder was a particularly intensive project which entailed constant design changes and debates over the appearances we wanted to achieve. . . . For example, we made and considered numerous different designs for the design of the windows, including the title bar and the size box, the dialog boxes, the icons, the tools for MacPaint, and the desk accessories such as Key Caps, Notepad, and the Calculator.

[Capps Decl. ¶ 3 (CR 228)]

Q. All right. What alternatives [for the animation of moving windows] did you consider?

A. We considered simply pointing at a starting place and pointing at a stopping place and having it jump to there.

We considered alternatives of flipping through pages and not -- not -- I mean, one alternative was not even showing multiple windows.

One alternative that we ended up staying with was showing an outline. We tried an alternative where we showed an outline, plus an extra piece of outline for the scroll bars because it was confusing as to whether you meant to move the content part of the window over to here, or whether you meant the whole body, including the scroll bar, over to here. I believe that's the one we ended up with.

. . . .

You could have a desktop metaphor that uses a pad of paper and you flip through sheets of paper and you don't

screw with the desktop. You could have a desktop metaphor that uses books you flip through. I mean, like a reception desk at a -- at a hotel, they don't use overlapping documents and they don't move one and see the desk under it; they flip pages in a book.

There are many different ways you could do a desktop metaphor that would present different documents without having to have these overlapping pieces of paper.

[Atkinson 236:25-237:17, 325:10-21 (CR 728)]

We considered numerous ways and techniques to highlight the active window before deciding to highlight and fill in the title bar and scroll bars of the active window while leaving the title bar and scroll bars of inactive windows blank. . . . This is an example of the interrelationship of the various visual displays since our design of title bars and scroll bars took into account how they could be used to differentiate the active window from inactive windows.

. . . .

Larry Tesler proposed animating the opening of an icon into a window, or the closing of a window into an icon, by displaying "zooming rectangles." In implementing this animation, I considered various ways of displaying this zooming effect, finally settling upon using four rectangles of increasingly greater or smaller size to achieve the zooming effect. All of these icon animation features were unique to the Lisa.

[Atkinson Decl. ¶¶ 7, 12 (CR 231)]

Q. Did you . . . consider any other ways to indicate [an open window]?

A. Sure. You showed me a document earlier today where it was whited out. We also looked at could we shadow it. We also looked at could we gray out the text.

We tried some different ways and just chose one that we liked.

[Atkinson 112:26-113:6 (CR 260)]

Q. Mr. Konzen, based upon your experience in connection with graphical user interfaces and user interfaces at Microsoft . . . do you know any reason that overlapping windows in a graphical user interface which embodies a desktop metaphor, such as Windows 2.03, must always have the same visual appearance?

. . . .

A. No.

. . . .

[Q.] . . . [D]o you know any reason that Microsoft could not have written applications style guidelines and provide building blocks that would present an appearance of overlapping main application windows that is different than that which is provided by the Windows 2.03 standard user interface?

. . . .

A. No.

. . . .

[Q.] . . .[D]o you know any reason that Microsoft could not have written applications style guidelines and provide building blocks that would present an appearance when main applications windows are moved that is different than that which is provided by the standard Windows 2.03 user interface? . . . .

A. No.

. . . .

Q. . . . [T]hat would present an appearance when main application windows are sized that is different than that which is provided by the Windows 2.03 standard user interface?

. . . .

A. No.

. . . .

Q. . . . [T]hat would provide an appearance of active main application windows that is different from that which is provided in main application windows of the standard Windows 2.03 user interface?

A. No.

[Konzen 165:5-167:6, 257:24-261:25 (CR 260)]

I have no reason to believe that there may not exist applications for a graphical user interface where tiled windows might be superior to overlapping windows.

[Crow 218:25-219:2 (CR 596)]

Q. You believe that tiling permits the maximum amount of screen to be effectively used, correct?

A. I believe that tiling is a method that allows screen space to be used effectively.

. . . .

Q. At that time, Microsoft believed strongly in the advantages of a tiled system, though, right?

A. At the time, we thought that tiling had its advantages, yes.

. . . .

Q. You can have, for example, tiled windows and be consistent with the desktop metaphor, like Microsoft did with Windows 1.0?

A. You could.

. . . .

Q. Now, is the appearance of overlapping windows, the expression that you see in the Macintosh, inherent in the desktop metaphor?

. . . .

A. The visual expressions that are in the Macintosh are not necessarily dictated by the concept of overlapping windows.

Q. They're also not dictated by the desktop metaphor, either, correct?

[A.] No . . . it doesn't dictate the particular expression that's on the Macintosh.

Q. That's also true for window sizing and window moving and showing a window partially off the screen?

. . . .

A. [Y]es.

. . . .

Q. [I]s the use of the outline [in moving a window in the Macintosh] inherent in a desktop metaphor?

A. No.

. . . .

Q. Is the expression of window sizing in Windows 2.03, Windows 3.0 and the Apple Macintosh inherent in the desktop metaphor?

A. I guess I would have to say no.

[Trower 322:17-20, 346:17-20, 465:2-5, 461:22-463:9, 466:15-17, 467:4-7 (CR 596)]

[I]t's difficult to talk about just the window relationships without expanding a little bit to the sort of totality of the user interface or the desktop metaphor. However, things that were considered were, for example . . . only one window being opened at a time, windows that moved out of the way when other windows were opened, windows that auto-

matically changed shape so that they didn't occupy as much screen space, desktops that were larger than the screen so that windows would not be completely visible . . . .

[Harslem 43:24-44:10 (CR 260)]

Q. Window moving in Windows 3.0 is accompanied by a thin gray border which tracks the cursor?

A. Uh-huh.

. . . .

Q. Is there a hardware constraint that requires Microsoft to adopt that particular user feedback?

A. I'm not aware of a hardware constraint that dictates that particular design or visual representation of moving a window.

[Boyer 53:5-7, 53:20-24 (CR 596)]

Q. Once you decided to follow the principle of obtaining a familiar user's conceptual model, your choices were somewhat limited, were they not?

A. No, that's not the way to think of it. If you divide it -- if you divide infinity by two you still end up with a large number.

[Smith 50:5-10 (CR 260)]

Q. Are there any constraints that come into play to stop an interface designer from putting an icon title on the top of the icon instead of on the bottom?

A. Not to my knowledge.

[Barrett 134:15-23 (CR 596)]

Identification of Witnesses Cited

Richard Abel	*Former Microsoft Group Product Manager for Windows*
Marianne Allison	*Microsoft Public Relations Consultant*
William Atkinson	*Former Apple Fellow*
Malcom Baker	*Apple Marketing Consultant*
Phillip Barrett	*Microsoft Development Manager, Windows 3.0*
Robert P. Beech	*President, Pharos Technologies*
Richard E. Berry	*IBM User Interface Architect*
Celeste Boyer	*Microsoft Senior Marketing Manager*
Stephen P. Capps	*Apple Principal Engineer*
William Crow	*HP Chief Architect for NewWave*
Pam Edstrom	*Microsoft Public Relations Consultant*
Gina Ferrari	*HP Marketing Communications Program Manager*
James Foley	*Professor and Director of Graphics, Georgia Institute of Technology (Expert Witness Designated by Microsoft)*
Dr. Bernard Galler	*Professor of Electrical Engineering and Computer Science, University of Michigan (Expert Witness Designated by Apple)*
Bill Gates	*Microsoft Chairman and Chief Executive Officer*
Adele Goldberg	*Manager, Xerox System Concepts Laboratory*
Viktor Grabner	*Microsoft Technical Evangelist*

Rajinder Gupta	*Vice President and Director of Information Management, Leo Burnett (HP Advertising Agency)*
Eric Harslem	*Manager, Lisa Software Group*
Guy Kawasaki	*Former Apple Employee*
Dr. Alan C. Kay	*Apple Fellow*
Neil W. Konzen	*Microsoft Windows Group Programmer and Technical Lead*
Frank Ludolph	*Former Apple Employee, Product Development*
Michael J. Maples	*Microsoft Office of the President*
Anthony Morris	*Morris & Associates, Inc. (HP Marketing Consultant)*
Daniel R. Schreiber	*Advertising and Sales Promotion Director, Zenith Data Systems (Microsoft OEM)*
Jonathan Seybold	*President, Seybold Publications, Inc. (Expert Witness Designated by Microsoft)*
Dan Shafer	*President, Graphical User Interfaces, Inc. (Expert Witness Designated by Apple)*
Dr. Ben Shneiderman	*Professor of Computer Science, University of Maryland (Expert Witness Designated by Apple)*
Dr. David C. Smith	*Apple Advanced System Designer; Former Xerox Interface Designer*
Jody Snodgrass	*Program Manager for Windows 3.0*
Lawrence G. Tesler	*Vice President, Apple Advanced Technology Group*
Tandy W. Trower	*Microsoft Director, User Interface Architecture*

Annette Wagner	*Former Apple Interface Designer*
Richard M. Walker	*HP Director, Sales and Marketing for NewWave*